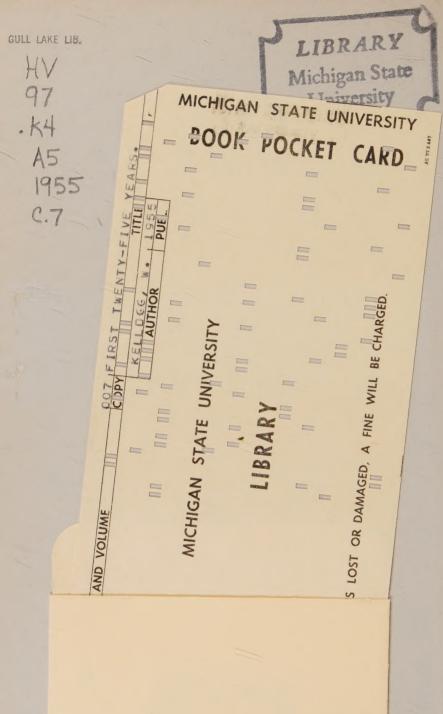
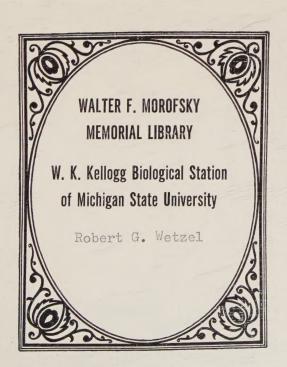
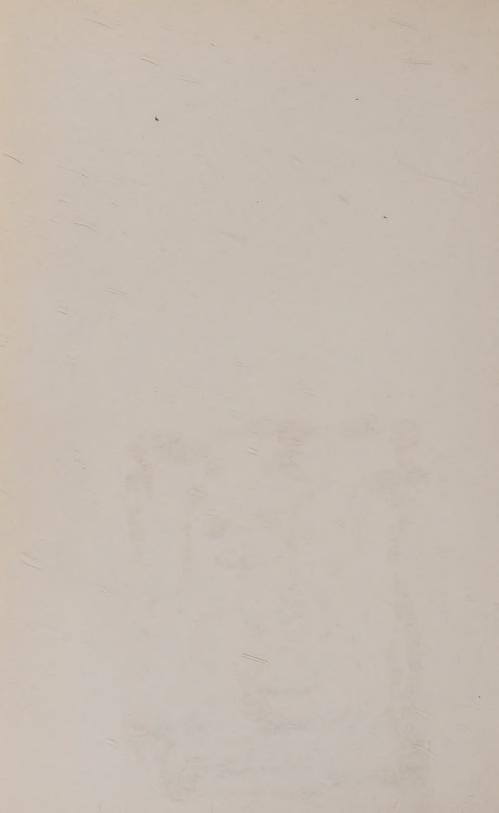
# The FIRST TWENTY-FIVE YEARS











Children are the heirs of tomorrow and the footprints which they follow are the legacy from one generation to another. Ours is the role of helping to improve this legacy.



# The First Twenty-Five Years

THE STORY OF A FOUNDATION

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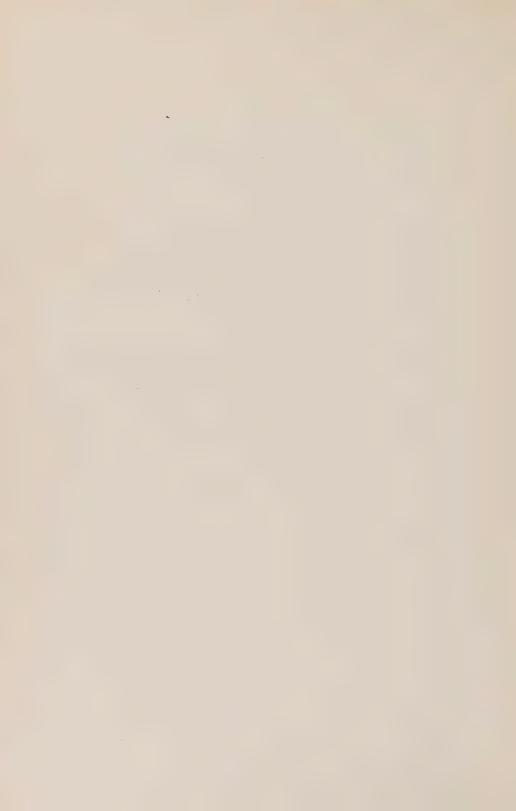
## W. K. KELLOGG FOUNDATION

BATTLE CREEK, MICHIGAN



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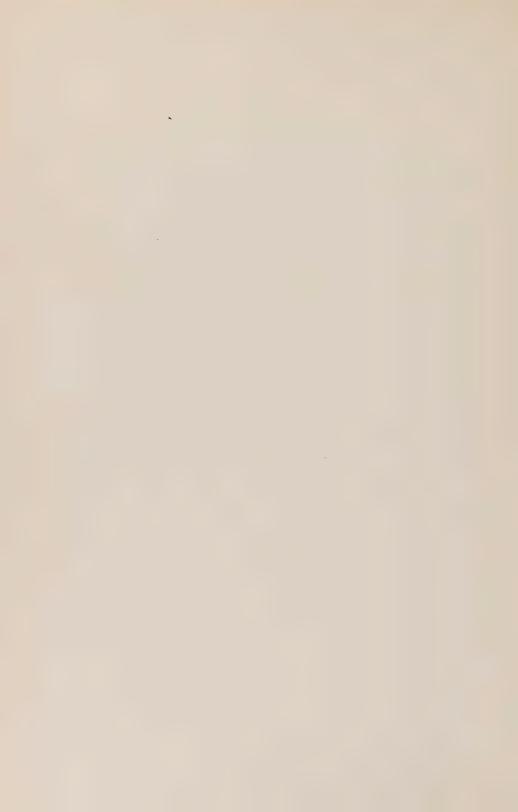
# The Past is Prologue

June 21, 1955, was a milestone for the W. K. Kellogg Foundation. The date represented the ending of the first quarter-century of activity by this organization. Appropriately the trustees, officers and staff paused to look at our past and to commemorate the wisdom of our founder, for of the Foundation and W. K. Kellogg it can truly be said that "An institution is the lengthened shadow of one man."

Then we primarily began to look upon the June date as the beginning of a wider opportunity to contribute to the progress of the people and of our nation toward a better world. Administering as we do a private fund for the benefit of the public, the chief observance of our twenty-fifth birthday has been in the re-examination of our activities and goals. Our activities are sound only if they are directed toward the basic and pressing problems of the people. Our stewardship is wise only if we remain alert to changes in the needs and problems of society and have the flexibility to change with the changing times.

The chapters which follow this introduction represent more than an annual report. They are an attempt to capsule some of the more than 1,500 projects and programs which have been assisted by the Foundation since 1930. In the sense that they look back at an evolving and exploratory pattern of activity, they are history. In the light of our renewed affirmation of the the belief of our founder that the wisest stewardship is "to help people to help themselves," the past is but prologue.

Emory W. Morris
President and
General Director



# The First Quarter-Century

E VEN PRIOR to the Foundation bearing his name, Mr. W. K. Kellogg sought to make his wealth available for the benefit of mankind. Soon after establishing his own company at the age of 46, he communicated with a friend and stated that "It appears my business will be a financial success, and it is my hope that anything I accumulate can be used for the benefit of mankind." Coming from a pioneering family and reared within the Seventh-day Adventist faith, it was natural that, in his life, service to others would be a strong, motivating force.

In the 1920s Mr. Kellogg established the "Fellowship Corporation" (so named because of his desire to keep his benefactions anonymous) which was administered by three of his early friends. This corporation made many contributions in behalf of youth including the Associated Boys' Club Building and the Ann J. Kellogg School in Battle Creek, and research relating to nutrition and certain studies on deformities of the hand.

Mr. Kellogg also personally supported many other helpful endeavors during these pre-Foundation years, principally the establishment of the Kellogg Experimental Farms of Michigan State University and of a bird sanctuary and reforestation development also given to the same institution, the subsidization of a radiation laboratory at the California Institute of Technology, and research on the cause and treatment of cancer. Being a businessman, he was convinced by these early efforts that if his resources were to be distributed so that they would produce maximum results, he needed an organization to do as careful study and planning for the proper expenditure of his money as he and his associates in the Kellogg Company had to do in making the money.



W. K. Kellogg at the time he established the Foundation in 1930.

In 1930 Mr. Kellogg served as a delegate to the White House Conference on Children, called by President Herbert Hoover, for whom he had tremendous admiration and who was regarded as a personal friend. The charter adopted by the Conference influenced the purposes in the original Articles of Association when Mr. Kellogg, on June 21, 1930, established the W. K. Kellogg Foundation, dedicated to improving the health, happiness and well-being of children and youth, without discrimination as to race, creed or geographical distribution. However, he did not make his major assets available at this time to the trustees and officers of the organization. Instead he requested the trustees to make recommendations as to worth-while activities and then he provided sufficient funds to support the projects.

Mr. Kellogg refused to serve on the first Board of Trustees. It was only after considerable persuasion that he accepted

". . . dedicated to improving the health, education and well-being of children and youth."



election as a member and trustee in 1935, and he would state on every appropriate occasion that he had nothing to do with the direction of the Foundation, that he "only signed the checks." During these years he also would periodically state that "I am not going to stay around and dictate how the money should be spent."

This did not mean that the new organization was to be deprived of his interest and his wisdom. Rather, the above remarks were an indication of his strongly held views on the principles of stewardship and the belief developed through his administration of the Kellogg Company that once a man is selected for a job, then he must be given free rein to do that job. Therefore, in giving full authority to the trustees and officers of the Foundation, Mr. Kellogg adhered to a "no dictation" policy throughout the more than two decades in which he observed the activities. His attendance at board meetings during the seasons he lived in Battle Creek was noted for the briefness of his stay, and he whimsically explained that this was because "the speeches are too long-winded."

During the early 1930s Mr. Kellogg created a number of trusts, the income of which went to the Foundation. Some of these trusts were revocable, others irrevocable. In 1934, when he was sure he now had the proper agency to administer his "helpful endeavors," he combined and restated these trusts and placed most of his remaining assets into an irrevocable trust known as the "W. K. Kellogg Foundation Trust." However, during his lifetime he made many other contributions to the Foundation, the total, including the residue of his estate, being approximately \$47,000,000.

In previous references we used the term "helpful endeavors." Mr. Kellogg abhorred the word "philanthropy" and shuddered when anyone called him a philanthropist. We coined the phrase "helpful endeavors" years ago to establish more acceptable terminology when discussing projects and programs with him. He became increasingly reluctant to have his name used in connection with Foundation-supported programs and facili-

ties, and suggested on numerous occasions that his name be removed from the Foundation's incorporated name.

As stated, Mr. Kellogg rarely made unsolicited suggestions as to the type of activity he considered proper for the organization, even though he maintained an office at the Foundation during the seasons he was in Michigan. However, he retained an avid interest in the activities and was always available for consultation. All reports were made available to him, and he paid special attention to the financial statements which he analyzed to the most minute detail. Paradoxically, for a man who gave away millions of dollars, he never lost a frugal attitude inculcated by his boyhood environment. For instance, he never could understand why it was "necessary to make long distance calls to give money away."

It was fortunate for our organization and the programs it assisted that Mr. Kellogg's background and interests did affect the policy and operations. Because of his long association with the Battle Creek Sanitarium, he was cognizant of the many health problems that confront people and communities. It was largely because of this association that he always advocated the principles of moderation and prevention and that he developed a deep respect for scientists and the research method. Due in part to the fact that the success of his business was dependent upon the raw materials produced on the farm, he was extremely sympathetic to the problems of rural people and communities. Because of his pioneering efforts in advertising and his knowledge of its effectiveness, he realized the value of the dissemination of information to improve life for his fellow men. The lack of educational opportunities for him as a youth caused him to believe that the only sure way one generation could advance over its predecessor is through improved educational opportunities for our youth.

In reviewing the past twenty-five years, it is evident that the above beliefs and others of our founder have made their imprint on Foundation policy. For instance, the last ten years of his life Mr. Kellogg was blind and developed a genuine in-



The Foundation's Trustees and Officers

Standing, left to right, W. P. Butler; Henry F. Vaughan; W. H. Vanderploeg; Leonard L. White, Secretary; Orville L. DeBolt, Treasurer; Haven Emerson; seated left to right, John O. Snook; Fred Sherriff; Bessie Rogers Young, Assistant Secretary and Assistant Treasurer; Emory W. Morris, President and General Director; Glenn A. Cross, Vice President; and Richard E. Pritchard.

terest in the problems of the blind. Thus it was only natural that we should devote some of our resources to this area.

2.

During the first quarter-century of Foundation activity, a number of persons have given unselfishly of their time, abilities and energies in service as trustees. It is they who have been the true stewards of the funds given by Mr. Kellogg. Serving with only token remuneration, they have established the policies which govern the activities of the staff. Drawn

from business and the professions, the members of the Board of Trustees review all program assistance recommended by the staff and officers and make judgments as to the appropriations to secure the optimum benefit for the people.

As determined by the trustees, it is the policy of the Foundation to expend all its income each year. In nine of the last fourteen years, expenditures have actually exceeded income. During the first years, however, this situation did not exist because Mr. Kellogg then provided the yearly funds only after the programs had been approved by the trustees. Therefore, the trustees and officers—acting principally through the then President, Dr. Stuart Pritchard—had ample opportunity to analyze the programs of existing health and welfare organizations and other foundations, as well as the community needs expressed by the people themselves.

One of the earliest decisions reached by the trustees was that our major efforts should be devoted to programs involving the application of existing knowledge rather than basic research. Studies indicated that several of this country's foundations were supporting basic research in the health and educational fields. However, the trustees felt that the gap was too great between this research and what was known concerning many of the health and education problems at the community level and what was being done about these problems. They believed there was a place on the American scene for foundations primarily concerned with the application of existing knowledge.

Another basic policy was established during these early years which has proven fundamental in the development of the proper relationships with recipients of our funds. It also has guided the Foundation toward the proper role in all its efforts to help mankind. This policy can be stated as follows: The Foundation does not have problems except those involved in the wise expenditure of its resources. Individuals, communities, states and nations do have problems. If they desire to do something about them, have a good plan for accomplishing results and are willing to contribute some of their own

time and resources to a solution, then and then only, does the Foundation provide assistance.

In other words, the Foundation has no preconceived ideas and programs it wants to promote. Programs must arise from the needs of individuals, communities, states and countries and their desire to bring about self-improvement. However, operating under this policy does not relieve us of our role with respect to leadership. We must identify leaders and in many instances encourage these leaders to develop a plan of action. This is probably the most challenging role that the Foundation has to play, and the success of its activities is dependent on how well it plays this role.

In his aid to others prior to the establishment of the Foundation, Mr. Kellogg adhered to the self-help principle which is a part of the policy stated in the preceding paragraph. We have consistently followed this policy and will not provide assistance unless there is indication that the people concerned are willing and potentially able to support ventures which have demonstrated their continuing value.

As the activities evolved during the early years, it was recognized by the trustees that our charter placed certain limitations on the type of efforts we could support. Many of the activities that communities desired to initiate were not directly related to children but it was obvious that they, in the long run, would benefit children. For example, early in the 1930s the Foundation was asked to assist in the development of improved hospital facilities in southwestern Michigan. These facilities could not be justified entirely on the basis of the services they would render to children. They were aided because they would provide for these communities a higher quality of health service.

The above and countless other examples caused the trustees to discuss with Mr. Kellogg the limitations made by the Articles of Association through the designation of "children and youth" as the sole beneficiaries of Foundation assistance. In his usual direct manner, he suggested a simple solution by redefining



The Foundation offices occupy the first two floors of this building at 250 Champion Street, Battle Creek.

the beneficiaries to be: "... mankind, but principally children and youth." Subsequently, he recommended a deletion of the latter portion of this new definition so that the amended purpose of the organization was stated to be "for the promotion of the health, education and welfare of mankind." Eventually, the purpose of the Foundation was further broadened and today reads "to receive and administer funds for educational or charitable purposes." These important alterations provided the trustees and officers the opportunity greatly to expand the scope of the Foundation's activities in ensuing years.

If foundations are to be concerned primarily with pioneering and experimental efforts, it is necessary that their policies and scope of interests be extremely flexible. And as the social and economic conditions of a nation change, philanthropic organizations should be in a position to modify their interests and to support experimentation and demonstration that will provide people and communities with experiences that will better prepare them to adjust to these changes.

For example, economic relief was a major problem facing this nation in the early thirties when the Foundation was established, and the organization devoted a considerable portion of its resources to relief purposes. These expenditures reflected the desire of the trustees to assist people to acquire the basic essentials of food, clothing and shelter and to aid agencies and communities to maintain services in the health and educational fields. Even so, the trustees decided early that the long-range program should principally concern itself with pioneering ventures that would improve existing programs concerned with the health, happiness and well-being of people. By the end of the thirties, much of the responsibility of relief had been assumed by the federal government. With the development of this pattern, the Foundation discontinued its support for pure relief and devoted its resources to new ventures. However, should a situation develop in the future comparable to the 1930s, our policy should be so flexible that we could immediately support relief programs if it were to the best interest of the public.

Today our major interests are in the fields of agriculture, dentistry, education, hospitals, medicine, nursing and public health. In the years ahead the opportunity for constructive efforts may lie in entirely different fields and if we are to utilize our resources for the maximum benefit of the public, we should not hesitate to shift from any one or all of these fields to other areas that need private resources to foster the continuing growth and success of this country.

3.

Historically the Foundation's activities during its first twenty-five years can be divided into three periods: The first ten years, 1930-40; the war years, 1941-45; and the period since the end of World War II. During the first period our activities were developed primarily in southwestern Michigan. While

the original purpose of the Foundation, as stated in its Articles of Association, was broad as to geographic scope, the trustees believed that the first programs should be developed on a limited scale in a nearby area so as to provide for intensive study and experimentation and to allow gradual development of staff and policies.

The next step, therefore, was a study of the rural area around Battle Creek in which the staff was impressed by the difference between what was known and what was actually practiced in the fields of health, education, welfare and recreation. The experience gained by association with the ensuing programs in the health, educational and recreational fields during the first ten years convinced the trustees that the Foundation had matured to a point where it could expand its scope of interests to include the national community. Many programs developed at the local level by the people of southwestern Michigan had application on a broader base, and the trustees felt that they had the responsibility of expanding the geographic scope so that other areas could benefit from the experiences gained during the decade. Policies were adopted and plans were made to provide for such expansion of interests to the national level just at the time this country entered World War II. Illustrating a flexibility in activities and purpose, the trustees almost immediately altered the Foundation's direction and devoted our resources and efforts to the aid of programs directly concerned with the war effort but within the framework of the experience of the trustees and the staff.

During the war period assistance was also provided a number of programs in Central and South America. At the war's end, we reappraised our activities. Consequently, we resolved that not only should we expand our interests to a national basis but also that we should continue in Latin America and extend our scope to include the entire Western Hemisphere.

The first major efforts in our expanded field were outgrowths of early experiences developed during the first ten years. Our interest in post-graduate education for physicians, dentists,



Mr. Kellogg,
as he neared
ninety, and
his shepherd
dog, Rinette.

nurses, public health personnel, teachers and school administrators, our assistance to projects in continuing education, in hospital administration, community schools and agriculture, largely resulted from preliminary experiences and testing at a local level. Where the success of such testing was significant, we were glad to entertain requests for assistance to programs on a larger scale.

In planning and reviewing worth-while opportunities for Foundation activities since the war, the trustees and officers have relied heavily on advisory committees that serve each area of major interest. Leading authorities in the various fields make up the personnel of these committees, and they meet periodically with the officers and staff to evaluate current activities, review requests for assistance, and to consider new areas for possible future assistance.

#### 4.

Within the first quarter-century of the existence of this Foundation, great changes have occurred in the American community. Many factors, of course, have been involved in the changes—the growth and increased mobility of population; improved communications; the automobile and better roads; electricity and electronics in once-remote rural areas; a general sharing in an improved economy. Yet, undoubtedly, more than these material factors are involved in any explanation of the changes. Perhaps viewed collectively, the story of these communities offers an optimistic evidence of democracy triumphant, of the ability of people living at the grass roots to develop new patterns of betterment of community life.

Sinclair Lewis' "Gopher Prairie" of 1930 is scarcely recognizable in its garb of 1955, and the changes go far beyond surface appearances. As early as the former year, local leaders—men and women a step or two ahead in their comprehension of the contemporary scene—had begun to share the conviction that democratic processes applied to community planning

might result in better living for all. There remained a need for vigorous forces to inject a new spirit to lead to a renaissance. As one of these many forces, foundations subsequently sought by the use of "risk capital" to act as catalytic agents for desirable changes in community life.

While many community problems remain unsolved, others have been mitigated, and the very multiplicity of the patterns for improvement lends evidence that democracy has been present in the attempts. Since the American way of life is essentially a composite of the ways of life found in small communities throughout the nation, and much of the stability of America comes from Main Street, there appears to be a logical premise for foundation funds to aid cooperative community programs.

Chapter I of this book sketches the community of 1930 and its counterpart of today. It will, of course, be impossible to trace all the factors creating the great changes of the quarter-century. It is our hope, however, that the reader will be able to discern that the interests of the Foundation during its first twenty-five years have paralleled to a greater or lesser degree the self-betterment activities and progress in a large number and variety of communities.

"Education offers the greatest opportunity for really improving one generation over another."



### Chapter 1

# THE AMERICAN COMMUNITY: 1930-1955

In its first quarter-century of assistance to people in their will to live better, the W. K. Kellogg Foundation has sought to focus upon the needs of the community. Whether the community be a small town, a state, a nation or even a community of nations, the educative approach has seemed the avenue to solution of the problems encountered by any community as it strives to improve the pattern of its living. The Foundation has always believed that if the best of current thought and existing knowledge is made available, the community will study its problems, learn to appreciate the wealth of its resources and will find its own answers working with and through accepted or hitherto-undiscovered leaders.

Many of the factors which have influenced community life within the last twenty-five years have been unusually dramatic. For example, severe economic extremes, national and international conflicts of ideology, a world war, technological revolution with ensuing cultural lag, and broad population changes



have marked the era. How is the community of 1955 different from that of 1930? Obviously, a short chapter cannot be definitive with regard to this vast subject, but it is hoped that this sketch will give a glimpse of the changes within the American community during the quarter-century. Perhaps it is logical to assume that such a metamorphosis has occurred in most communities of our country, whatever their size and wherever they are geographically located.

The community in America is the stronghold of the individual. Whether the community is a part of a large city, a suburban development, a small town or a rural area held together by its church and school, that community is the place where a man is known by name and respected according to his abilities. He can speak for himself on community issues. He can participate actively in local government. He can represent his neighbors in larger units of government outside of the community. Because the community is the stronghold of the individual, it is the cornerstone of American democracy.

The community operates within a framework of state and national policy—a framework that reflects a sensitive and everchanging balance between desires for state and national unity and the demands of citizens that there be no interference with local affairs. The vigor of community action fluctuates according to many factors such as individual leadership, local traditions, the nature of local problems, the resources for solving the problems and assistance from outside the community.

#### Some Problems of The Period

A few of the outstanding community changes during these twenty-five years may be traced by reviewing some of the community problems met during the period. These problems came from the same areas of human concern which have supplied people with problems throughout history. The areas may be classified in many different ways, but in this brief sketch the focus will be held upon the following categories of individ-

ual and community concern: material essentials, recreation, health, education, citizenship, morality and work.

#### Material Essentials

Because of the tangible nature of the necessities of lifefood, shelter and clothing—the changes in the production and consumption of such material essentials over the twenty-fiveyear period are readily apparent. A population which has grown from 122,000,000 in 1930 to 162,000,000 in 1955 enjoys today the highest standard of living yet known. In 1930, however, public and private relief were vital. Much of this change can be credited to great increases in the production of food, housing and clothing. The American people, working together in their communities, learned how to produce and distribute more goods. They set up educational programs designed to give specific skills and to train local leadership. For example, communities using federal aid have established effective vocational classes in the public schools. Throughout the country, communities have provided plant and equipment for the teaching of agriculture, home economics, merchandising and technical skills. In addition, the state and local school districts spent \$4.18 for each dollar of federal aid used in maintaining the classes. Young people and adults flocked to these classes during the thirties, and they have continued to avail themselves of the opportunity to learn more about securing the material essentials of life. Today over three million students are enrolled in vocational classes.

Significant in the above changes has been the fact that old town lines are increasingly ignored through inter-community programs which, among other results, have heightened agricultural and industrial production. Improved communication has meant that innovations and improved technics in one community become available to adjoining communities and eventually to entire regions. This is true whether the effort is to improve dairy herds, to attract new industries or to build a community center for the farmers of a shopping area. Thus

the ancient curiosity to know "what other people are doing" and the more-recent willingness to share the benefits of increased knowledge have played a part in the great increase of material essentials for the people during the quarter-century.

#### Recreation

The problem of leisure—how to use increased leisure for personal development in such areas as the aesthetic, the cultural and the physical—is always with American communities. In the early thirties, depressed economic conditions made this problem acute; in the early fifties, increased automation, even to the introduction of "thinking machines" in industry, is providing greater efficiency and productivity, and there are many factors pointing to a shorter work week. And changes in the home life of our communities complicate the problem for children and youth. Routine home chores and home-work projects (with the exception of voluntary do-it-yourself hobbies) are now uncommon. Unrestricted employment of youth outside the home has been curtailed by stricter child labor laws. Children and youth form a new leisure class, and juvenile delinquency troubles almost every community.

Leisure in large quantity presents opportunities that have not been overlooked in American communities. For example, camping experiences have been made possible for many boys and girls. Some of these experiences have become more meaningful because they have been integrated into the public school program. There were no bona fide school camping programs twenty-five years ago, but today twenty-four states have one or more school systems which use school-time for a camping experience of at least one week in length. One state has seventy-five schools using camping as a regular, integrated part of their curricula. Such programs emphasize aesthetic and cultural activities as well as the usual physical routines. Handicrafts provide training in useful hobby work, and nature study supplements classroom demonstration in biology. Train-



Camping experiences have become more meaningful for boys and girls by integration into the school program.

An introduction to surveying is one enrichment of the school curriculum.



Boys learned camp-lore at a Foundation-sponsored camp.

A school camping assembly using "home talent".



ing in wholesome use of leisure is accomplished and many of the more formal aspects of education are enriched.

American communities have greatly improved and expanded their facilities for recreational activities at all age levels. Children and youth have their well-equipped playgrounds, their lighted ball parks, "teen centers," club and organization programs and many other activities, supervised and assisted by adult leaders. Adults have their community theaters, their community concert series, their local symphonies and choruses, their lecture series. Parks, local, state and national, have grown in number, size and facilities but still are inadequate to meet the increased use American families are making of them. National parks alone have increased from a total area of approximately eight million acres in 1931 to almost fifteen million in 1953. In 1930 there were 3,246,000 visitations to these parks. By 1953 the number of visits had increased to 46,224,000!

Agencies with other major objectives have joined to give American communities better opportunities for wholesome use of leisure. Churches, libraries, schools and luncheon clubs, for example, merge their resources in a planned program for an entire community. Coordination is usually achieved by the work of a community council or recreation committee representing the participating agencies and the groups being served.

These are but few of the many evidences that while the problems of leisure are still serious in American communities, they are not being neglected.

#### Health

The people have been greatly concerned during these twenty-five years with their health problems. Unique opportunities have existed for advances in medical science and in the application of medical knowledge to human needs.

The readiness of the public for these advances is seen in the nation-wide development of public health departments. As these agencies have grown, public health has become an established profession and plays its part in health services to com-



"Advances in medical technology and in the science of medicine have practically eliminated deaths from communicable disease, a serious danger only twenty-five years ago."

munities so that epidemics may be avoided, sanitation problems solved and a joint assault made on other health problems.

Significant changes in the field of medicine are revealed in a review of some statistical reports. Although the number of physicians in relation to the number of people is about the same, there are fewer doctors in villages of less than 1,000 poplation, but more doctors in urban areas large enough to support a hospital. There is an appreciable increase in the number of specialists in relation to general practitioners.

Advances in medical technology and in the science of medicine have practically eliminated deaths from many communicable diseases which posed a serious danger to children and young people only twenty-five years ago. Today the chief cause of death at every age from one through thirty-four is

accidents. Only after people reach 35 is the death rate from accidents exceeded by that from heart disease and cancer.

In a parallel fashion, the remarkable development of antibiotics and the so-called "miracle" drugs have decreased infections of all kinds, thus greatly expanding the possibilities in the field of surgery. New equipment and improved surgical instruments are of vital aid to the physician and surgeon.

Along with the modernization of the tools of his profession, the physician himself is keeping abreast of the times through postgraduate medical programs by which he is apprised of continuing developments in the field. A decentralized aspect of some of these programs means that advanced medical education is being taken to the physician, with medical faculty personnel traveling to community hospitals for participation in clinics, ward rounds and forums. The communications media of television and radio are also being used to keep physicians and surgeons conversant with changing technics.

A striking contrast between the physician of 1930 and his counterpart of 1955 is made by the comparatively recent trend toward "preventive medicine" whereby today's physician is interested not only in the treatment of disease but also in the prevention of the onset of disease where prevention is possible. This trend is based on a recognition of the broadening responsibility of the practicing physician for the promotion of health, the care of acute and chronically ill patients and for the rehabilitation of the patient.

Since 1930, there have been spectacular advancements in the area of hospital care and administration. Although the expansion of hospital facilities in most of the United States was at a virtual standstill during the depression-ridden thirties and World War II, the past ten years have seen unprecedented construction in the hospital field. A major impetus was the passage by the Congress of the Hill-Burton Hospital Construction Act, thus making available to local communities generous amounts of matching funds. Pre-payment plans to meet the expenses of hospitalization were organized in the early thirties

but did not begin to reach a significant number of the population until the years following the War. Such insurance plans, together with a greatly improved economy and revolutionary changes in the practice of medicine, have resulted in an almost overwhelming present demand upon hospitals. In 1955, there were over 20,000,000 hospital admissions and probably three times this number of visits for out-patient services.

As hospitals became recognized as indispensable components of a community, more attention was directed to their operation. In 1934, the first graduate program in education for hospital administration was established under university auspices. Following the War, the number of such programs was substantially increased, and the need for professional preparation in this field has been well demonstrated. In 1955, hospital administration is much nearer to the status of a true profession than was the case in 1930.

During the quarter-century, widespread changes have also taken place in the field of nursing. These changes, affecting nursing education and nursing as a profession, have been reflected in the nursing services available in communities and the effects will be even more noticeable in the next few years.

Subsequent to the organization of a National Nursing Council to represent the combined interests of the several national organizations, a thorough study of all types of schools of nursing preceded a nation-wide movement to improve nursing education. In contrast to 1930, enrollment in collegiate schools of nursing is increasing at a more rapid rate than in hospital diploma programs, and an accreditation program is contributing toward the improvement of all educational programs in nursing.

A second movement of considerable importance has been the increase in the preparation of practical nurses. The rapid expansion of health services and tremendous changes in the medical care of patients have enlarged the need for auxiliary personnel to augment the services of professional nurses. Studies are being made with the purpose of freeing the fully qualified nurse from non-essential activities so that she may give maximum service at the professional level, including the supervision of nursing care given by auxiliary nursing personnel. There is a growing recognition of the value of the "team approach" in nursing services. Research activities, involving the increased use of scientific methods to study nursing education and nursing service problems, offer much promise for future developments in the field.

There still remains an uneven distribution of nurses, with tremendous shortages in chronic disease hospitals, particularly mental institutions, and with the general hospitals employing eighty-eight per cent of the total number working in hospitals. Most community hospitals are meeting their current needs with a staff of graduate nurses assisted by trained practical nurses and auxiliary personnel.

Dentistry has been marked by two particularly noticeable changes in the past twenty-five years. The first is the tremendous increase in the use of auxiliary dental personnel such as chair assistants and dental hygienists; the second is the growing emphasis on prevention of dental disease. Dentists are no more numerous in proportion to the population than they were in 1930, but they are serving a much greater per cent of the public—a public newly awakened to the importance of early and regular dental care. Many dentists, utilizing dental hygienists, chairside assistants and laboratory technicians, now employ two or more chairs and other auxiliary equipment in order to serve more patients. About forty per cent of the population now receives reasonably adequate and regular dental care—a small proportion still, but much larger than in 1930.

Dental education and dental public health have made substantial advances in the past quarter-century. Dental schools, now affiliated with universities and medical schools, teach dental health service in relation to the patient as a whole and the dentist's responsibility to his community. Graduate and postgraduate education programs have been greatly expanded by schools of dentistry, and opportunities for continuing education are now available to dentists in most sections of the country.



In many rural areas of the nation, antiquated little white (or red) schoolhouses have been succeeded by consolidated schools. Shown is the W. K. Kellogg Agricultural School at Delton, Michigan, one of several consolidated schools built partially through funds of the Foundation.

The dental needs of children receive greatly increased attention. In addition to such efforts toward controlling dental disease by early and periodic care, fluorides are now applied directly to the teeth of children and added to communal water supplies. These fluoridation measures are responsible for as much as seventy per cent reduction in the incidence of dental caries. Today more than one thousand communities in the United States are fluoridating their water supplies.

Many of the changes in the health fields and services, only briefly alluded to in the above, have largely come about through the improved education — preservice, in-service and continuing education—of all health service personnel. Educa-

tion has been largely responsible for the changed attitude of the public toward a fuller realization of the importance of better health practices.

#### Education

Although the educative process is the channel through which we acquire many skills, attitudes and understandings to solve problems, the citizens of American communities expressed very little interest in their schools during the early thirties. Then, the schools were, in fact, captives of the school administrators and teachers. Today, however, citizens are reasserting their interest and re-establishing their ownership of the schools. Several sensational community controversies have given the impression that the public is very critical of public school systems, but more careful observation reveals great pride and general support. People are studying school programs and the problems that face education today. Efforts to solve these problems have brought many changes in the area of education during the past quarter of a century. A few of these changes will be illustrative of the trends.

Financing public education has been a problem in American communities since colonial days. During the thirties, schools struggled to secure a firm financial base in an economy that had crumbled, but in the prosperous fifties the struggle continues, for school costs have increased along with all other living costs. Many more dollars have been made available for public education by increasing taxes and by allotting to schools a larger proportion of the tax dollar. At the same time, however, the birth rate has risen. By 1960, a further increase of twenty per cent in the elementary school enrollment and of twenty-eight per cent in the high schools is inevitable. The children who will make up these increases are already born and many of them are already in school. More buildings and more teachers must be available to meet such increased enrollments. Thus, 1955 presents a particularly difficult and crucial problem in school finance to the American community.

School district reorganization has been a major problem since public schools became the common schools of America in the 19th century. The handicap of numerous small districts and ineffective organization was still upon the country in 1930. During the next decade, however, demonstrations of the values of reorganization lessened the impasse. One state, for example, reorganized its 11,955 school districts into 4,580 districts during the years from 1944 to 1950. Today, lay leaders and school board members in most areas have accepted the principle of larger, more efficient districts.

The emphasis in 1955 is upon more effective administrative procedures in conducting the school business of a district, whether it is large or small, new or old. The leading associations of educational administrators have been quick to see the need for new preservice and in-service preparation programs for their members. Such needs have also been recognized by institutions of higher education. New training programs are based upon a broad background of sociology, economics and political science and they emphasize skills in communications, in public relations and in democratic methods. The school administrators in American communities today are rapidly becoming educational statesmen—real leaders in well-planned community-wide educational programs.

Although many of the problems which faced education during this twenty-five year period were administrative in character, some did concern aspects of the education program. Many schools have experimented with programs designed to establish a close relationship between school and community. Now in the early fifties there is a real readiness for the development of community schools. Lay citizens and school personnel see many advantages in an educational program which relates local resources to community needs. Children and young people learn techniques of problem solving while they master the tools of learning. A major element of the community school concept is that education continues throughout life. In our day of rapid technological development, research find-



Opportunities for learning and practicing citizenship are increasingly available to the youth of this country.

ings must reach adults as well as youth. Community schools are serving people of all ages. Such schools use the educative process as a means of channeling new information, reducing the lag between what is known and what is applied. And such schools are helping large numbers of citizens participate more actively in public education today than was possible in the year of 1930.

#### Citizenship

How can good citizenship be developed? Increases in juvenile delinquency, continuing adult crime, and the irresponsibility and selfishness of some public and private officials point up a serious problem for every community. How can the individual gain an understanding of and participate in governmental activities, thus fulfilling his responsibility to society?

The problem of building good citizenship was complicated during the early thirties by the problems of a depressed econo-

my, but it seems to be complicated even more today by the problems of prosperity. For example, exploitation of natural resources flourishes in an economy that is constantly preparing for war. Charges and counter charges of graft and corruption in government confuse voters. The tempo of American life today adds other complications. Increased highway travel brings problems of responsibility and fair play that carry life and death importance. Suburban living means commuting with long days away from home. In the city, however, older residential areas deteriorate into shabby, overcrowded neighborhoods and there is a trend on the part of the more prosperous families toward suburban living.

During the past twenty-five years, communities have grappled with the citizenship problem courageously. There is cause for encouragement in the growth of the "community chest" or "united funds" idea. Such evidence of cooperative effort among community agencies engaged in charitable, character-building and health-improvement activities is as welcome as the fact that more and more citizens are supporting the work of these agencies.

Another evidence of revitalized community action, with improved citizenship as a cause and result, lies in the increasing use of community councils throughout the country. Many councils were organized during the late thirties, while another period of active organization occurred after World War II. Some of these councils served for many years while others lasted only a short time but even though a council disbanded, its work made a community more sensitive to local problems and more ready to solve such problems. A general interest in community self-improvement is shown by citizens in all parts of the country. The objects of such efforts range from home-beautification projects to community campaigns for better local government. The immediate results may be disappointing or quite praiseworthy but the long-term effect is almost sure to be improved citizenship.

Lest the accomplishments in strengthening citizenship dur-

ing the past twenty-five years look overly impressive, one of the less optimistic aspects of the period should be mentioned. A forty-five per cent increase in teen-age crime has occurred since 1948. The number of child delinquents appearing before juvenile courts increased seventeen per cent between 1948 and 1951—an increase three times as large as the increase in the population of children ten to seventeen years of age. And the increase in the number of juvenile arrests is part of a general increase in criminal activity by persons of all ages. More than two million major crimes were committed in the United States in 1952, an increase of 8.2 per cent over 1951. Today's unsolved problems in the realm of citizenship are indeed a challenge to the citizen and to social and educational agencies.

# Morality

Aristotle distinguished "moral virtue" from "intellectual virtue." Since his time many different ways of life have prevailed in the Western Hemisphere but each has had a code of ethics based upon the mores of the period. Usually the prevailing church leadership assumed the responsibility for enforcing current moral codes. The American concept of the separation of church and state, however, has limited the authority of church leaders and has placed much responsibility upon individuals and upon communities.

During the past twenty-five years, the trend in the United States has been toward more voluntary community-wide cooperation in "character-building" efforts. Two examples will serve to illustrate this trend. The membership of the Young Men's Christian Association has more than doubled since 1930. Communities not only support the local "Y" more generously today but look to it for new community-wide services. And the churches and synagogues in many communities are coordinating their efforts through local ministerial associations. Divergencies of belief are bridged and community problems are faced cooperatively and seriously. The importance of training



The trend in the U. S. has been toward more voluntary communitywide cooperation in "character-building". Shown is a Sunday nondenominational religious service held at a Foundation-sponsored camp.

in the home and of relating such training to character-building and to educational agencies is receiving new emphasis in 1955.

#### Work

Whether he be working on the land or in a factory, working with his hands or with his mind or with both, man must work if he is to meet his many needs and to satisfy his normal desire to contribute to society. During the past twenty-five years, the American community has experienced a far-reaching change in the area of work.

In American communities of the early thirties, work was hard to get. Many individuals lacked preparation for any skilled work; others had been prepared for work which was not then available; still others were dissatisfied with work which did not fully utilize their capabilities. Unemployment was a serious community problem. Now in the middle fifties, unem-

ployment is no problem except in a few areas and with a few industries. Many workers are banded together by a labor union, a trade association, or a professional organization, each striving in its own way to improve the lot of its members. Wages and salaries move upward to meet inflationary living costs, but the threat of further inflation is balanced by the promise of economic stability. Developments in the area of work have helped the American people attain and enjoy their world-famous high standard of living.

Two developments have been particularly encouraging to the hope that the American community will continue to meet change with wisdom. The first is the recognition by labor, by industry and by professional groups of the need for in-service education. Today it is generally agreed that no formal educational program completes the education of any individual. New developments in industry and in the professions are now channeled to the worker and to the professional person by many types of continuing education activities.

The second development is the growing recognition that older people are economically and socially useful persons.

"Whether he be working on the land or in a factory, man must work if he is to meet his many needs and contribute to society." Pictured are participants in a Foundation-assisted farm short course.



With the proportion of our population over sixty-five years of age increasing from four per cent to eight per cent in about half a century and with the prospect that twenty years from now eleven per cent of our population will be over sixty-five, such recognition is imperative. Social security benefits, private pensions and improved health enable many more people over sixty-five to maintain their own homes, to travel and to live independent, active lives generally. An increasing proportion of them are also continuing to contribute to society through work appropriate to their abilities.

#### A Challenge to American Communities

The past twenty-five years have been crowded years, full of change. The few illustrations of that change which have been mentioned here provide an incomplete picture of the period, of course, but they reveal American communities learning again to solve their own local problems. After a brief dependence upon outside help, communities regained their strength. Citizens learned more than they had ever known before about community action. They developed skills in working together, tried new techniques of problem solving, sought the help they needed from local, state and national agencies, both private and public. Citizens grew in their individual strength in revitalized communities.

Today national and international problems of unprecedented magnitude press upon American citizens. They often grope as they try to meet the responsibilities a representative democracy places upon them. The new problems call for creative thinking and cooperative action by all citizens. American communities today are challenged to use their strength in solving their own local problems and then to extend their strength so that the problems of the larger geographic areas (state, nation and world) may be solved in a manner that retains respect for the individual man.

As intimated previously, the W. K. Kellogg Foundation has

always had a primary interest in the struggle of individuals and communities for self-improvement and to shape a better future. Life in a modern community—be that community a village, a state or a nation — is a complex affair growing out of the impact of world forces and technological and sociological invention upon the simpler and largely agrarian culture of most of the previous century. Thus has come CHANGE—rapid, progressive and confusing change!

In the wake of such change, intricate social problems have arisen, and in its role as a "silent partner" to assist communities to cope with conditions reshaped by events and years, the Foundation has sought to be sensitive to the altered needs of those it serves. Such assistance must not remain static, for philanthropic aid is sound only if directed toward the dynamic processes through which the community persuades itself to improve the pattern of services to the people. Hence foundations must remain alert that the needs and problems of human welfare are ever-changing and must stand ready to readjust the planning and course of any assistance to be given.

Dreams are the mind's best architect. First comes the dream —an idea, an inspiration in the mind of an individual or in the thinking of several men and women. Welding this dream to reality is the determination of the people to build communities where good men can walk in dignity and in peace, and where there are green places on which children can play. For nearly two hundred years, the American Dream has moved toward this ultimate reality. It is our hope that this Foundation plays a true role in the realization of this dream through making possible more effective application by the people of existing knowledge and techniques and thus reducing the gap between research and its application for the public good. "Education offers the greatest opportunity for really improving one generation over another."

As community leaders have sought to improve the schools, the libraries, the health services, social benefits usually have accrued. Sometimes the experiments have affected to a degree the evolution of health and education ideas in a nation or a community of nations. However, whether the benefits from a particular project have been large or small—whether the community served is a village or a republic; whether an experiment has been adjudged "successful" or a relative "failure"—the Foundation has not altered its initial belief that the wisest stewardship of its funds is to aid communities in new approaches to what are actually old problems of human welfare.



# Chapter 2

# COMMUNITIES IN ACTION

From its beginning the Foundation has devoted its attention to local community problems falling within the areas of interest delineated by its founder and Board of Trustees. In fact, as has been indicated previously, the first years of the Foundation's existence were almost entirely directed to assisting projects on a local level in southwestern Michigan. In more recent years and despite the expansion of our interests to other parts of the world, we have continued to channel a major portion of our resources to help communities in the solution of their problems. These cooperative efforts now include assistance in the fields of agriculture, general education and health throughout the Western Hemisphere and parts of Europe.

In considering requests for assistance to communities, the Foundation has attempted to assay the potential contribution to the solution of similar problems in other areas. Thus, a cooperative program concerned with the initiation of medical diagnostic services in a rural Michigan area may well point to how other communities may organize similar programs. And

in a broader sense, the republics of Central America and Panama, which joined efforts toward solution of their common nutrition problems, may indicate to other countries and areas the value of cooperative action by a community of nations.

This chapter concerns a grouping of Foundation-assisted projects and programs which have a common characteristic of "Communities in Action"—whether that action involves particular agencies or strata of a community, an entire community, several towns and areas across a state and even the nation, or community action on an international scale.

Communities in Action in a Seven-County Area

## THE MICHIGAN COMMUNITY HEALTH PROJECT

In 1931 the W. K. Kellogg Foundation became a year old and, with the energy of the young, it faced the selection of a major plan of action further to implement its prime purpose of "the promotion of the health, education and welfare... of children and youth..."

Conferences with various leaders in the State of Michigan, a review of the activities of other foundations in the field, the nineteen points of the Children's Charter framed at the White House Conference of 1929, and discussions of Mr. Kellogg with President Herbert Hoover, all played a part in the crystallization of Foundation thinking.

At the time, there was a general movement throughout Michigan to expand local public health services, and the Children's Fund of Michigan (established by the late James Couzens) was assisting with the formation of district health departments in northern Michigan. What would be a practical area for the initial approach of the W. K. Kellogg Foundation to assist experimental ventures in the health and educational fields? There was a consensus on the part of the small staff that "Little ships should stay near shore," and it was decided that at least the initial projects should be close at home.

Barry County—adjoining the Foundation's home county—was interested in expanded health services but lacked the finances for its own health department. With such desire and need as the criteria, the Foundation agreed to the request of citizens of Barry County for financial assistance to set up a county health department, with such funds to permit a scope of activity beyond that of the ordinary department.

Similar assistance was extended to three counties—the number subsequently was expanded to five counties and eventually to a total of seven nearby counties—but the extension was a gradual development and was not conceived of in one fell swoop. One factor which led to the expansion of the program was the increase in Foundation assets through a trust established by Mr. Kellogg. A broader program was possible. How many counties could be included in the project (which by 1935 came to be known as the Michigan Community Health Project) based upon the Foundation's expanded income, and what was a maximum number for the practical testing of the experiment?

Full-time health services, with Foundation aid, were started in Barry County in 1931. Allegan and Eaton Counties were extended Foundation assistance for a similar purpose in 1932 and 1933 respectively, while the project spread to Van Buren and Hillsdale Counties in 1934 and to Branch and Calhoun Counties by the following year.

## An Experimental Approach

Thus evolved an experimental approach, one of the earlier community efforts concurrently to examine and influence major factors affecting the child. The MCHP in its expansion to seven rural counties of southwestern Michigan was granting assistance not to an impoverished area but one fairly well supplied with resources both human and environmental. These counties were near enough to each other and to the Battle Creek headquarters of the Foundation to permit the counties eventually to organize into a field training area. Because the



The stimulation of these communities to action in an area of 280,000 people presented a great challenge to leaders in the localities, and community groups as pictured constructively planned for the future.

counties were contiguous, their various programs could reinforce each other, and this made possible varied attacks upon the many similar problems.

The stimulation of these communities to action in an area of 280,000 people presented a great challenge to leaders in the localities, to the consultants of the headquarters and field staffs and to the Foundation which provided approximately eight million dollars as financial resources for the work between 1931 and 1945. The guiding philosophy of the MCHP was the belief of the participants that local leadership, circumscribed by no preconceived plan but stimulated by the best of current thought, could develop effective methods to solve community problems and to help people to help themselves.

If such an experiment in human relationships should prove successful in these seven counties—typical of thousands of

other communities throughout the United States where health programs were practically non-existent, schools were neglected or inadequate, and community hospitals and libraries were either absent or of poor quality—then not only would the children of the seven counties be immediate beneficiaries but children throughout the nation would benefit.

Particularly could a successful program be advantageous to rural children, for it had been discovered that in rural areas, perhaps more so than in the city, lived America's forgotten child. Advances made up to 1931 in sanitation, in the control of communicable diseases, in pediatrics, in mental hygiene, in character training, elementary education and organized recreation, had been more pronounced in urban areas rather than rural areas. The low farm income up to that time had prevented the families in rural areas from enjoying the fruits of scientific, social and educational progress.

#### Steps to Organize Activity

In what was to become a gigantic laboratory and a demonstration and teaching center, a strong coordinating agency was essential. Since improved health services were a paramount goal of the new project, what was more natural than to look to county health departments for leadership? These departments played the key role in stimulating community interest and guiding the total project. Although official parts of the various county governments, they were atypical in their assumption of additional administrative responsibility for Foundation-supported activity whether in the fields of health, education, recreation or other phases of child and community welfare. Every activity was cleared through the health department which cooperated in joint planning with the other health departments and the Foundation staff. Because of the Depression of the early 1930s, and the Foundation's financial aid, personnel was available to staff the departments far beyond that of the ordinary county health department—both qualitatively and quantitatively. Recruiting was compara-



"The staffs of the county health departments and of the Foundation were consultative bulwarks to the efforts of various community leaders . . ." Shown is a meeting during the MCHP days of the Calhoun County Health Department staff at which also were present two Foundation consultants and a Foundation fellowship student.

tively easy because the MCHP beckoned to professional personnel with unparalleled opportunities to test out long-held theories in a field of action.

The staffs of the county health departments and of the Foundation were consultative bulwarks to the efforts of various community leaders to combine scientific knowledge and cooperative teamwork under the workings of a democratic and evolving plan. Such teamwork was the prime factor in this project designed to give direct service to the children, to solve fundamental problems involving health promotion, care of the sick, and to promote basic improvements in education and recreation to be worked out on a local basis.

The citizens of the seven counties generally participated in the development of the Project although there were, of course, varying degrees of enthusiasm toward the many segments of MCHP. This southwestern Michigan Project was made up of typical communities of rural America, often jealous of their prerogatives and frequently suspicious of many "new-fangled" ideas. Teachers, supervisors, school board members, doctors, dentists, parents, formed fairly compact groups but ones which occasionally worked at cross purposes.

The utmost diplomacy was demanded of the citizen leaders of the Project. The scene of its endeavors comprised communities never wealthy in the best of times, now suffering from the worst agricultural depression in history. The county leaders were asking their peoples to participate financially in supporting agencies which, hitherto, had been regarded as comparative luxuries. Always the Project had the difficult task of reconciling the interests of varied groups in order to enlist effective cooperation on a child betterment program.

#### Education Seemed the Answer

To the citizens of the area and to their consultants, education seemed the answer to many community problems. Consequently, much of the help went to improve educational opportunities for a wide variety of people. Although the provision of better services in the community also occupied a major place in the total effort, the long-term primary objective was to advance the skills of professional and lay people to enable them to define their own needs and to solve their own problems.

To this end, the Foundation supported a variety of educational opportunities. Meetings, conferences, field trips and workshops were held in the counties for the benefit of such groups as teachers, editors, government officials and school custodians. When physicians and dentists agreed to the roles they were to play in the medical and dental programs, their requests for additional training caused the Foundation to finance for them special postgraduate opportunities in cooperating institutions which established courses, the better to equip these professional persons for the expanded services. And when



Community improvement was recognized as primarily an adult responsibility but the educational process was not confined to adults. The enthusiasm spilled over to children who, even at the elementary level, studied the elements which combine to make a model community.

school administrators, board members and teachers discovered that there were many other phases of the school program affecting the health of the child besides health education—the physical plant, the curriculum, the organization of work, rest periods, home study, the hot lunch program—there was a general reconsideration of school affairs as a whole, and many educators sought and received Foundation assistance to obtain additional university preparation for study and solution of the problems that were involved.

The staffs lending assistance to the community leaders had an experimental approach and attitudes of scientific curiosity in the endeavors to improve community health, education, welfare and recreation. As an example, there was extensive research on the use of visual records in health departments, the better to define and distribute health services. Health records in the offices of the physicians and dentists became a part of this

system. Another example of an experimental approach was the inauguration of a home delivery nursing service, financed on a fee-for-service basis and administered by the local hospitals. Many similar experiments were conducted, a few of which are described elsewhere in this report.

Of great value was the cooperation of key professional and lay societies and the discussion with them of the numerous community problems. This cooperation made possible the extension of health services such as prenatal visits and infant supervision, pre-school and school physical examinations and immunization procedures, normally carried out by health departments but here established by common agreement as the responsibilty of the general medical practitioner. They were conducted in the physician's office as part of his private practice with no distinction made because of the patient's inability to pay for these services. The primary objective was to interest the physician in preventive medicine and to encourage the patient to rely on him for preventive procedures. Pertinent

"The county leaders were asking their peoples to participate financially in supporting agencies which, hitherto, had been regarded as comparative luxuries . . ." Shown are Barry County milk producers and distributors meeting with the county health department to plan for an improved community supply of milk.



findings from physical examinations and data on immunizations were reported by the physicians to the health department.

# Supplementary Services Were Subsidized

The Foundation subsidized these supplementary services where patients were not able to pay all or a part of the cost. In some instances, when remedial service such as tonsillectomies and eye-glasses were indicated, Foundation funds were made available to meet a part of the physician's fee.

Similar programs were conducted in the offices of the dentists. Children in the younger age group received continuous dental supervision including diagnostic, preventive and remedial services on a planned schedule developed by the dentist and the family. Dentists took the initiative in keeping the family informed of appointment schedules. Health information regarding dental care became an important part of the office visit. Foundation funds provided postgraduate courses for dentists and also contributed toward the cost of diagnosis and treatment when this was necessary. In dentistry as in medicine the purpose of the program was to demonstrate the value of early and continuous supervision of children as a preventive measure and to stimulate the dentist to take responsibility for the practice of preventive dentistry.

Supplementary service programs extended into the laboratory and X-ray departments of hospitals. The use of tuberculin tests and subsequent chest X-ray and other diagnostic laboratory procedures became a part of the clinical examination and resulted in a closer working relationship between the physician, the hospital and the health department.

The health departments conducted intensive nutrition education in cooperation with county-wide school hot lunch projects. A special project in the counties was a cooperative venture between the Massachusetts Institute of Technology and the physicians of the area to determine, through surveys, the nutri-

The cooperation of key professional and lay groups made possible the extension of health services normally carried out by health departments but here established as the responsibility of health practitioners. Thus were aroused a greater interest in preventive medicine and dentistry and a reliance by the patient upon the family physician and dentist for preventive as well as curative procedures. The Foundation subsidized the services where patients were not able to pay the total fees.





Examination of Eyes

Examination of Ears

Physical Examination

Immunization

Dentist reviews cha with child-patient





tional status of school children and the effect of adding quality protein and vitamin supplements to the school lunch.

Other services for children included the testing of hearing, certain psychological services and remedial reading projects. Specialists in several fields were made available as consultants to parents and school authorities, and activities blossomed which led to school consolidations, school building improvements, vastly improved libraries and recreational facilities seldom seen in rural areas up to that time. The experiment went relatively far toward bringing advantages for the rural child to a par with those of the children in urban areas.

### The Project is Evaluated

The Michigan Community Health Project was also used extensively as an area for the field training of public health personnel. Large numbers of students and visitors spent varying periods of time in the counties, and the opportunities for training came to occupy a prominent place in the total activity. As a yardstick to measure the community health programs, the evaluation schedule of the American Public Health Association was used continually in the counties. The Foundation supported evaluation activities of the Association through grants totaling over \$100,000 to improve and extend the use of the schedules nationally.

In 1942, a publication, *The W. K. Kellogg Foundation; The First Eleven Years*, documented the aspirations and achievements of the Michigan Community Health Project. This history is now out of print but is available for reference in the Foundation's library at Battle Creek.

By 1941 the key administrative units of the Project, the county health departments, were operating on a budget of \$1.00 per capita, with the state contributing 10¢ of this amount, the counties 25¢ and the Foundation the remainder. By 1945 the entire responsibility for the health departments' basic budgets had been shifted to tax funds. The shift, engendered by the gradual discontinuance of Foundation subsidy of the



As the MCHP Foundation subsidies gradually were lessened, the willingness of the people to vote taxes to maintain the county health departments indicated their appreciation of the value of the health services. Illustrated here are two of the several services continued through tax funds—home visits by public health nurses and inspections of food processing plants by sanitarians.

MCHP, did not mean that the departments were expected to absorb the augmented staffs and sweeping activities made possible for nearly fifteen years through Foundation funds. Nevertheless, many of the activities and the improvements resulting from the Michigan Community Health Project continue as a permanent imprint of communities-in-action.

The Foundation began in 1941 to discontinue its subsidization of the Project and concluded its assistance in 1948. This was for several reasons. In the interim since the start of the activity, the Foundation had shifted its policy from direct participation in projects to indirect participation limited to financal aid. There also had evolved a belief that most of the activities aided by Foundation subsidy should, if proved worth-while, eventually find support from the community, institutions or other agencies. Then, by the termination date there had been a dynamic demonstration of what communities in action could accomplish, and the findings had been generally disseminated to interested individuals and communities in many sections of

the nation. The value of the health services had become recognized by the people and they had indicated their willingness to maintain them.

Many of the ideas developed and proved by the people of these communities in the fifteen-year experimental program found their way into later programs assisted by the Foundation in the United States, Canada and Latin America. Thus they are contributing to a "communities in action" process that seems never-ending in American democracy. Because of the possibilities for their continued use, the balance of this chapter is devoted to a resume of some salient activities for community improvement, usable not only in the MCHP but in other areas of the nation and the world where Foundation assistance plays a part.

Community Action for Improved Health Facilities

# RURAL HOSPITAL AND HEALTH CENTER CONSTRUCTION

In the period between World Wars I and II the need for hospitals in rural areas was not yet fully recognized. Rural citizens had been much slower than their "city cousins" in the building and developing of adequate hospital facilities. There were various reasons for this difference, including a lack of resources to finance such programs, a reluctance to use hospitals fully, and finally, a belief that smaller hospitals would be unable to maintain acceptable standards of care and operation.

However, growing concern for better and readily available local health resources impelled several MCHP communities to action. Their efforts to obtain improved hospitals for the Michigan Community Health Project area led to the granting of approximately \$875,500 of Foundation funds. These were used in the construction and equipment of hospitals, and, in some instances, in the modernization of existing facilities.

The objective was not only to demonstrate the importance of the hospital in the community health program, but also to indicate whether such modern facilities could be economically maintained and still provide adequate patient care. It had become evident that adequate hospitals were essential in the establishment and maintenance of quality health services. With the quantitative and qualitative advances in medical practice, it also was apparent that modern, well-equipped hospitals were an important factor in attracting physicians to practice in communities. A portion of the capital financing in some of these projects was secured from the Federal Government, and for all programs the local communities made varying contributions to the total cost.

With the increasing complexity of medical care and the enlarged public demand for such services following World War II, the need for rural hospitals in this country has become more widely recognized. The findings of the Commission on Hospital Care, published in 1947, as well as the enactment of the Hill-Burton Hospital Construction Act, have further confirmed the importance of the rural hospital in our social structure.

#### **Erect Health Centers**

Still unresolved has been the problem of adequate health care for millions of citizens who live in sparsely settled and more remote rural areas. In an experimental approach to the problem, five isolated communities in Michigan—too small to support a hospital but recognizing adequate health facilities to be an indispensable part of community life — were given assistance by the Foundation to erect "health centers."

These units have as their purpose the attracting of physicians, dentists and other health personnel by adequate office quarters and treatment facilities, and the coordinating of the area's health services including, in some instances, the housing of the local public health department and the providing, where necessary, of a limited number of hospital beds.

An experimental aspect of the health centers in three of the localities is their affiliation with a regional hospital whereby the resources of the larger institution, such as professional and



Growing concern for better local health services impelled several Michigan Community Health Project communities to obtain improved hospitals. Foundation funds of more than \$860,000 were used for this purpose. A typical community hospital aided by the Foundation was the pictured Branch County Hospital with up-to-date equipment in a modern sixty-bed structure. In subsequent years this, and virtually every other health and education facility to which the Foundation provided construction funds, have been expanded by local community resources.

Five isolated communities in Michigan—too small to support a hospital, but recognizing adequate health facilities to be an indispensable part of community life—sought and were given assistance by the Foundation to erect "health centers." Pictured is one such center serving the people of the St. Ignace, Michigan, area in the Upper Peninsula.



administrative consultation, group purchasing services and the interchange of patients, are made fully available to the health center. Although no specific conclusions have yet been reached concerning several of the program's objectives, the centers have succeeded in attracting qualified young physicians. The further development and use of the centers is subject to a continuing study by the communities and others concerned with the problems of supplying improved health services to the people in remote areas.

Communities Improve X-ray and Laboratory Services

#### DIAGNOSTIC SERVICES FOR RURAL AREAS

Inherent in the public's desire for better health care is the need for better diagnostic services. Hospital X-ray and laboratory departments provide the physician with information essential to diagnosis and treatment not only for in-patients but for those in the community at large. Generally speaking, these services in rural and small-town hospitals have been less adequate than those located in larger centers. For many years, the Foundation has had an interest in this problem and has directed its assistance to the establishment or upgrading of these services in smaller institutions and to determine whether the departments could be self-supporting.

Toward these ends, the Foundation from the mid-thirties to 1954 aided over forty hospitals in Michigan and northern Wisconsin. This assistance has been in the form of payments for X-ray and laboratory equipment and supplies; the remodeling of facilities, if indicated; help in obtaining radiologists and pathologists to supervise the services; underwriting, if necessary, the service's operating deficit for an initial period; and in-service training scholarships for not only the diagnostic departments' personnel but other categories of hospital workers.

An important demonstration of the program in Michigan has been that through cooperative action small communities can obtain adequate diagnostic services which eventually can Better health care presupposes better diagnostic services. The Foundation has aided over forty hospitals in Michigan and northern Wisconsin to secure modern X-ray and laboratory equipment, to remodel facilities, to obtain radiologists and pathologists to supervise the services, and to use in-service scholarships for the training of personnel.



Through cooperative action, these small communities are obtaining adequate diagnostic services through . . .

... modern diagnostic equipment ...

... up-to-date laboratories ...

... and visiting consultant services to the staffs of smaller hospitals.





become self-supporting. Although a small hospital ordinarily cannot secure a qualified radiologist and a pathologist (essential to the conduct of diagnostic services) through its own resources, the combined resources of two or more such small institutions are usually sufficient to engage these specialists. In other instances the problem can be solved by obtaining these special services through a part-time arrangement with a nearby larger hospital. These patterns of support are fully described in a brochure, *Medical Diagnostic Services for Small Communities*, published by the Foundation in 1949.

A graphic illustration of the program's impact and the working together of many small hospitals is found in the sparsely settled Upper Peninsula of Michigan. Following World War II, there was only one radiologist and no pathologist to serve the more than twenty hospitals in this area of 16,511 square miles and 300,000 people. A few hospitals did not have even rudimentary X-ray or laboratory departments; others no more than the minimum essentials. Foundation aid was extended to fourteen hospitals; eleven for both X-ray and laboratory departments and three for the laboratory alone. As a result, the services of six radiologists and three pathologists are now shared by most hospitals in the region. Another important aspect was the establishment of deep-therapy X-ray equipment and tumor clinics in four of the region's principal hospitals. Prior to these installations—the first such in the Upper Peninsula—it was necessary for some patients to travel distances as great as hundreds of miles for this specialized treatment.

In addition to assistance provided in Michigan, the Foundation aided four other states in the initiation of consultation programs in diagnostic services. Following World War II, the passage of Public Law 725 (the Federal Hospital Survey and Construction Act) had resulted in the establishment in all states of official agencies responsible for the expansion of hospital facilities. Foundation assistance to these agencies in Colorado, Illinois, Minnesota and Mississippi made possible

their employment of coordinators to work intensively in the improvement of the states' diagnostic services.

Foundation grants in support of all diagnostic programs have totaled in excess of \$604,000.

Community Hospitals Cooperate

# HOSPITAL GROUP PURCHASING AND ACCOUNTING SERVICES

The spiraling costs of providing patient care are of concern to all hospitals and to the public as well. In 1950 the Southwestern Michigan Hospital Council, an association of rural and larger hospitals, established through Foundation assistance a successful group purchasing program, an example of community action toward the reduction of hospital costs.

In its first five years the group purchasing program experienced growth both in the number of hospitals participating and the volume of purchases made for the membership. Initially there were eighteen hospitals which made purchases totaling \$162,000 through the Council. In 1954 the cooperating hospitals numbered forty-three, and their purchases through the Council were \$339,000. The member hospitals have advanced the funds needed for working capital while administrative expenses have been met by a small mark-up on purchases, by hospital dues, and by a subsidy from the Foundation.

#### Group Accounting Increases Efficiency

The success of the Southwestern Michigan Hospital Council's purchasing project was predicated upon the cooperation of many community hospitals to solve a common problem. Another example of cooperative community action is occurring in Canada where The Associated Hospitals of Manitoba, aided by the Foundation, inaugurated a "report accounting" program in 1954. Because most of the Manitoba hospitals are very small and have limited financial resources, a major



In any provision for good community-wide health services, the physical facility is only part of the story. Besides the building, there is a necessity for adequate tools—an up-to-date diagnostic laboratory, modern hospital equipment, an adequate medical library. Modern, well-equipped hospitals are an important factor in attracting physicians to an area. Pictured are an operating room and a well-stocked medical library, both in small hospitals located in Michigan.



problem is their maintenance of good accounting systems. To assist such hospitals, the hospital association provides a centralized accounting service to which each participating institution submits data relating to its fiscal operation. The central office transfers this information to accounting machines, feeding back to the hospitals complete financial and statistical reports not only for each hospital, but also for comparison between hospitals. In addition, a consulting accountant visits the hospitals periodically, interpreting the reports to the superintendents and boards of trustees. It is the association's belief that, through charges levied on participating hospitals, subsequent financial support for this program can be secured.

To assist the group purchasing and central accounting efforts, the Foundation made commitments in excess of \$100,000.

School Programs Improve Communities

#### COMMUNITY SCHOOL SERVICE PROGRAM

The Foundation's deep interest in aiding communities to solve their problems has led to assistance in many areas of community living, including general education.

During the Michigan Community Health Project, the Foundation assisted in the development of several consolidated schools, which had as a primary purpose the extension of each school's influence in the community beyond the traditional teaching of the "three R's." In 1945 the Michigan State Department of Public Instruction conceived the idea of an intensive experimental project to be conducted under its supervision for the purpose of testing the concept of how a dynamic school program could enrich and improve the life of a small community. The primary goal of the Department was "to discover the best ways of improving community living through the services of the school . . . to take all we know about a community, put it together in a working program of

community self-improvement and observe what happens, and to put the community school idea to a rigorous test."

The Foundation made contributions of about \$200,000 to the support of the experiment, which terminated in 1953. Five widely separated, small Michigan communities—Concord, Elkton, Mesick, Rockford and Stephenson-were selected for the pilot phase of the project beginning in 1946. each area the initial step was to identify the community problems, and from that point to evolve specific programs. utilizing not only local but state and occasionally national resources, for implementation. Although the community school itself was the program's catalyst, most of the subsequent activity was in problem areas not within the range of the conventional school program. Local leaders such as bankers, merchants, ministers, farmers, housewives, school administrators and teachers, librarians, professional people, county and town officials participated. Each town established study groups to explore eleven problem areas: health and nutrition, farm and land use, farm organizations, home and family living, recreation, education, religion, community service, citizenship, publicity and legislation.

In 1948 the number of participating local school systems was broadened to include three other Michigan communities, Allegan, Bronson and Newberry. In 1949 another expansion occurred when the program was initiated in a five-county contiguous area—Grand Traverse—centering around Traverse City. This aspect differed from the earlier phase chiefly in the fact that rather than a single community attacking its problems, a regional approach of many communities working together towards a common goal, self-improvement, was evolved. These communities in the five-county region sought and found ways of working cooperatively toward solutions of their diverse problems. The organizational pattern was also enlarged to include improvement of the economic productivity of the area, which was a major concern to the group.

Numerous changes occurred in all of the communities in

which the project was undertaken. Improvements were initiated in such diverse ways as the development of a small health center in Mesick, the expansion of recreational facilities in Rockford, the establishment of an area junior college in the Grand Traverse region and changes in agricultural practices in Stephenson. More importantly, "when these factors were brought together—the desire for improvement, leadership and technical assistance—we found that people in small communities and an urban center learned to work together and to use available resources to solve specific local problems."

The story of the attempts by two of these communities to make their towns better places in which to live has been documented in a 16 mm. color and sound film, A Tale of Two Towns, made for the Foundation in 1951. This film graphically contrasts the ways in which these towns, with similar problems and ambitions, set about their tasks of identifying problems, inventorying resources and then developing teamwork to use local resources to best advantage.

Farm Communities Join in Cooperation

# EXPERIMENTAL AGRICULTURAL EXTENSION PROJECT

Throughout the world today agricultural production looms as an increasingly important problem. Even in the United States, with its apparent abundant agricultural resources and present over-supply of some commodities, some people predict serious food shortages may result in the next generation. Consequently, any concerted efforts to improve and to increase our agricultural practices and knowledge are believed to have significant implications for the nation's future. Unfortunately, it has been demonstrated that the gap between the development of scientific farming information and its subsequent widespread adoption by the farmers themselves is as great as ten to fifteen years.



Increased agricultural productivity is the end purpose of the Experimental Agricultural Extension Project. Involved are more individualized services to the farmer through the employment of Assistant County Agents to confer with groups of from 100 to 150 farmers.

To help in lessening this present time-lapse between agricultural research and its subsequent application, farm groups in five widely separated Michigan communities have joined together in cooperation with the Foundation and Michigan State University to initiate a unique adaption of the widely known "county agent" extension program. Ordinarily a county agent is hard-pressed to serve adequately his constituents who may number as many as 3,000 individual farmers. In the five pilot areas cooperating in the experimental intensive extension project, a township, rather than county, is being used as the basis for the retention by the cooperating farmers of a full-time consultant who is an extension worker.

With perhaps only 100 to 150 farms to serve, this agent thus has much greater opportunity to study the farms as individual

problems and to give more personalized services to the farmers. From such a concentrated effort it is hoped improvements in soil conservation, rotation of crops, use of fertilizers, care and management of stock, and generally better farm practices will result. It is believed that the full-time availability of such an individual to work on an intensive basis with relatively few farmers in a limited area will prove sufficiently valuable to more than justify the agent's salary and other expenses.

The Foundation has committed a total of \$270,000 for a five-year period beginning in 1953, to subsidize the program's operation and also to defray the costs of a continuing evaluation of its effectiveness by Michigan State University. The participating local farmers in the experiment are making increasing annual contributions toward the program's cost, with the hope of completely defraying the attendant expense at the termination of Foundation aid. It is believed the analysis of the project by Michigan State University may have substantial implications relative to future developments in agricultural extension work and its effect upon farm communities.

#### Communities Seek Home Safety

#### HOME ACCIDENT PREVENTION

Sketched in earlier portions of this chapter were examples of communities-in-action to attack problems which, if not local in character, were limited to an area of a state. The concluding sketches delineate a broader mobilization of community resources. "Home Accident Prevention" shows action beyond state boundaries while "Nutrition Programs" illustrates community action on an international scale.

Although occupational accidents have been greatly reduced and much effort is being expended to find ways to lessen the death toll on highways, little has been done to prevent accidents in the home. There has been a real need for marshalling community forces and arousing public opinion to attack the problem of home accidents which annually have taken the lives of some 30,000 persons during the last two decades.

To determine the role of the health department in spear-heading and coordinating such an effort is the purpose of what has become a nation-wide experimental program, financed in part by the Foundation. The concept that public health workers are trained in the fundamentals of disease prevention and should be able to adapt these principles to accident prevention has been an important consideration.

Foundation assistance, beginning in 1948 and made to the Kalamazoo, Michigan, Health Department, spread to three other health departments—San Jose, California; Mansfield, Ohio; and Cambridge, Massachusetts. Activities in the Kalamazoo area have revealed that an intensive community educational program involving wide participation by groups and individuals will reduce the number of deaths from home accidents. Methods for the organization of community efforts toward home safety are being evolved. Studies in these counties have shown how certain epidemiological and sampling surveys can be made to obtain needed information about home accidents; how home safety activities may be integrated into the routine duties of a health department staff and how community awareness of the problem may be brought about.

#### **Expands to State Level**

The success of these communities in experimenting with the home accident prevention role of local health departments prompted the Foundation to consider requests from eight state health departments. Such departmental requests from California, Georgia, Kansas, Kentucky, Maryland, Massachusetts, North Carolina and Oregon were for assistance to similar experimental activities on a state-wide basis to determine the state department's place in a prevention program. Experience in these states indicates an increasing interest of local health departments in home safety work. At this early stage participants are of the opinion that many more local departments of

health need to be convinced that home accident prevention should be included in their responsibilities. Once such responsibility is accepted, there remains the problem of integrating the new service into the program of the health department. Various local studies also have shown some of the limitations of collecting basic information on home accidental deaths and injuries. Other problems encountered include the need for inservice training of health department personnel in home safety and how local community effort can be effectively organized from the state level.

To give additional impetus to home accident prevention efforts nationally, the Foundation in 1953 made a commitment of \$30,000 to the National Safety Council to enable it to expand its activities in home safety. In all, the Foundation has committed \$947,984 toward home accident prevention projects.

#### Community of Nations in Action

#### NUTRITION PROGRAMS

The mobilization of community resources to attack common problems or to drive toward desired goals is not restricted to local or regional areas. Communities-in-action in the broadest sense; i.e., nations, are but aggregations of people possessing human problems and the need to solve these problems. In some fields, without any surrender of autonomy, countries have taken action through a community of nations to accomplish improvements not practicable for a single small nation. One such instance is a nutrition program in Latin America.

Latin American countries had long recognized inadequate nutrition as a major health problem and, therefore, observed with particular interest a study in 1942 conducted by the Massachusetts Institute of Technology. This study, financed by the Foundation, used the medium of a school lunch program to determine the effect of food concentrates on the nutritional status of a group of 760 Michigan children. A hoped-for result

was the development of satisfactory food concentrates to be used in the war-devastated countries of Europe.

The aforementioned observation prompted a number of Latin American countries to request financial assistance from the Foundation toward solution of the nutrition problems of their peoples. Since 1943 the Foundation has given financial aid to such programs in Mexico, Guatemala, El Salvador, Honduras, Nicaragua, Costa Rica, Panama and Ecuador. These efforts have been developed in cooperation with the governments of these countries, the Pan American Sanitary Bureau, the Massachusetts Institute of Technology and with the support of other official and non-official agencies.

The broad objectives of the Latin American nutrition programs encompass a systematic study of the indigenous foods of the area and the preparation of food tables; a study of the dietary habits and nutritional status of samples of the population; and cooperative programs with agricultural agencies to improve the quality and quantity of the indigenous foods. They also include studies of special nutritional problems of an area such as endemic goiter and the development of an effective nutrition education program to give persons of all economic and educational levels an understanding of their nutritional problems and to motivate them to take part in their solution. An equally important objective is that of cooperation with international, national and local agencies in the development of programs for the solution of nutrition problems.

#### Governments Cooperate with INCAP

The most comprehensive Latin American program with which the Foundation is cooperating at the present time is the Institute of Nutrition of Central America and Panama, familiarly known as INCAP. Its major functions are to engage in scientific investigation and education and to give technical guidance to the member countries.

Action programs which result are the responsibility of each nation, and every participating country expends from \$5,000



During the last six years, the Foundation has cooperated with the Republics of Guatemala, El Salvador, Honduras, Costa Rica, Nicaragua and Panama in a joint effort to improve nutrition for their peoples. This has made possible significant growth in the influence of the Institute of Nutrition of Central America and Panama, know familiarly as INCAP. Shown above is the INCAP headquarters building located at Guatemala City. The pictures opposite illustrate . . .

... A Street Scene in a Central American village ...

... A home garden which reflects the research carried on by INCAP laboratories relative to the comparative values of vegetable and animal proteins, the improvement of corn, beans, and other local crops . . . . . and an INCAP demonstration in Guatemala whereby schoolchild lunches are improved by supplemental vegetable protein.



to \$30,000 annually to finance field teams to carry out such programs. This team functions as a nutrition unit of its respective Ministry of Health and in cooperation with the Institute. The nations make annual appropriations toward the operational cost of INCAP which has its central offices and laboratories in Guatemala. The Institute is noteworthy not only for its accomplishments in the field of nutrition, but also as an example of successful international relations.

The Foundation has expended a total of \$183,857 in support of INCAP activities. Such funds have been used to purchase laboratory equipment and supplies, library books and other educational materials, to supplement salaries, for consultation services and for the training of personnel. A total of nineteen fellowships have been granted for Latin American professional persons so that these individuals might have one or more years of graduate study of nutrition and related subjects.

The foregoing sketches of Foundation assistance to community action for self-betterment have dealt primarily with programs directly concerning adults but indirectly affecting children. Such endeavors were premised on the belief that to serve the interests of youth, the problems of the entire community, adults and youth, had to be considered. However, a number of programs aided during our first quarter-century have directly involved children and youth, and these are described in the following chapter.



## Chapter 3

# WELFARE OF CHILDREN AND YOUTH

Prior to establishing the Foundation in 1930 as the principal vehicle for his philanthropy, Mr. Kellogg had made a number of contributions to worthy causes. Notable among these were many gifts which were designed to improve the welfare of children and youth.

In reiterating to business associates and friends his fondness of children and his concern for their welfare, Mr. Kellogg often made reference to the fact that, "I never learned how to play." Undoubtedly, young W. K. Kellogg's part-time work in his father's factory at the age of seven, and his leaving school at age fourteen to work full-time, precluded any "learning to play" and influenced his later desires to improve the lot of youth.

Mr. Kellogg's reminiscences showed that he was strongly influenced by two other factors. When he, as a near-sighted school boy, had difficulty in seeing what was on a blackboard, a teacher thought him "slow-witted." In later years, when a tragic accident crippled a beloved grandson, Mr. Kellogg re-



In shaping the activities of the Foundation which was to bear Mr. Kellogg's name, the health, happiness and welfare of children and youth were his first and continuing interest.

called that all of his then-abundant resources were to little avail in preventing the lad's permanent physical handicap, and his love and sympathy for the grandson were translated to a deep and lasting concern for children everywhere.

It was natural, therefore, that in shaping the activities of the Foundation which was to bear his name, the health, happiness and welfare of children and youth were his first and continuing interest. With this thought as its guiding principle, the Foundation since its inception has directed much of its activity toward the welfare of children and youth. As related, in many instances it discovered that youth could best be served through assistance to adult programs. Other chapters in this book detail the service to youth through the consideration of the entire community but this chapter is the story of Foundation aid to programs with direct application to children and youth.

The Children Needed Better Schools

## RURAL SCHOOL CONSOLIDATION AND MODERNIZATION

Article X of the Children's Charter formulated at the 1930 White House Conference sought "For every child an education which, through the discovery and development of his individual abilities, prepares him for life; and through training and vocational guidance prepares him for a living which will yield him the maximum of satisfaction."

An important aspect of the Michigan Community Health Project in the 1930s was its attempt to implement this goal of better education for the child. The Foundation expended approximately \$2,000,000 to assist, through construction and modernization, many communities to improve their schools.

Consolidation of numerous small rural school districts into larger districts having a centralized facility was one way in which richer education programs could be provided. Faced with legal limitations on bonding for building improvements as well as on the amount of funds that could be raised for current operating expenses, the school districts, in many instances, were unable to take advantage of the then-available federal funds for new school construction because of the "matching" requirements set forth by PWA.

Citizens and school boards in the seven counties held numerous meetings to consider ways of meeting community educational needs. Was it more desirable in terms of over-all efficiency to modernize a school, transport children to other schools, or to consolidate districts? The tax structure, the school enrollment, the preschool census, the salary paid the teacher, her qualifications, and the educational program all were evaluated. These community studies of the rural school situation brought out the desirability of consolidation for many districts. In others modernization of facilities appeared to be the improvement most immediately feasible.

#### Schools Become More Modern

The Foundation assisted with the construction or expansion of twelve consolidated schools in the area. In most of these such assistance enabled the districts to meet their share of the costs under the PWA program. Each consolidated school provided better qualified teachers, practical courses in agriculture, farm management and home economics, a farm workshop, a library, cafeteria and kitchen, and facilities for extra-curricular activities such as the school band, glee club and school newspaper. The influence of the school was increased by its use as a center for community education and recreation.

Foundation grants also helped to modernize many small rural schools. "The real problem was not that the school door was hung on with bailing wire but that often many of the people in the district did not care how it was hung." Spurred by the opportunity to improve the physical plant, board members and teachers began to hold numerous meetings to consider many factors in relation to community needs. In reviewing the physical needs of the schools, people became more con-



Where consolidation of school districts was not practical, Foundation grants were used to modernize existing schools. Thus new desks (adjusted to the needs of large or small pupils), better lighting, improved heating and new plumbing gave comfort to "the little red schoolhouse."

cerned with a corollary of even more value, the educational program for their children.

Communities thus became more enlightened as to the value of modern school facilities. Eventually pressure water systems, flush toilets, modern heating, good lighting, and adjustable and movable furniture were made standard through the program of betterment which, in this instance, centered upon facilities. Several years later, many of these small schools consolidated, again to improve the educational opportunities for the children.

A direct result of the rehabilitation of rural schools was a modified program of modernization in village schools, many of which dated back to the '80s and '90s. In numerous instances, equipment and facilities were outmoded but, with Foundation assistance, the communities were able to provide new, movable

furniture to replace the old. New dining room and kitchen equipment was installed. Most important, the modernized equipment permitted reorganization of curricula. School personnel made the most of this opportunity to develop more extensive and richer education programs not only for children but for adults as well.

In later years, as a result of these experiences with rural school consolidation, the Foundation produced a film entitled *School House in the Red* to help other communities with similar problems to decide how best to improve their schools. Educators have indicated that the film has had constructive influence upon school reorganization and consolidation through showings in all sections of the United States.

A publication entitled Schools Awake was also issued by the Foundation. It was designed to interest other communities, which did not find immediate school consolidation practicable, in modernizing existing school facilities.

"Books are Friends"

#### THE MCHP PROGRAM FOR BETTER LIBRARIES

Adequate libraries and abundant printed materials are essential parts of programs to improve communities, professions, children and adults. Books outworn, outdated and unattractive can create "an apparent aversion to books and reading" but where good reading material is readily available and attractively presented, the young and the old tend to seize the opportunity for greater knowledge and entertainment.

Believing that one of the underlying reasons for the lack of the love of reading and adequate library services in rural America was economic, community leaders early in the MCHP used a portion of Foundation-supplied funds to create better library services and their greater use. When educational programs for various professional and lay groups taxed local library resources, a library was established at Foundation headquarters

### MCHP LIBRARY PROGRAM

BOOKS CAN BE FRIENDS—and several MCHP communities held book fairs such as the one here pictured. These showed the public how libraries can be improved and led to plans such as . . .

. . . the FIVE-FOR-ONE BOOK EXCHANGE. Under this plan the Foundation gave community and school libraries a new book for each five obsolescent books taken from dusty library shelves. Enthusiastic school children collected and brought the books to central "depots" where . . .

... TRUCKS HAULED THE BOOKS TO PAPER MILLS. Money from the old books thus disposed of went to the local libraries which used these and other funds to buy attractive, colorfully illustrated new books and periodicals . . .

... WITH THE END RESULT BEING ENTHUSIASM on the part of adults and children over the new treasures in their libraries. They had learned that truly "Books Can Be Friends" when such books are carefully chosen and library shelves periodically "renewed".



in Battle Creek for the use of the people of the seven counties. Then in an effort to place the local libraries on a par with other agencies which make for a healthy and sound community life, an intensive campaign was launched by citizen leaders to educate the populace to the fact that "All that mankind has done, thought, gained or been, is lying as in magic preservation in the pages of books."

Analyses of local facilities led to the routing of the old attitude of library trustees who would not invest money in books because "they were not read anyhow." A book loan and exchange service was subsidized by Foundation funds. Special courses for librarians and library trustees uplifted library practice throughout the seven counties. Committees of citizens were set up to study local library problems and methods of selecting new books and to evolve an exchange system between township and school libraries. For a period the Foundation matched all new book purchases made by the libraries and some county library systems were established.

#### Five-for-One Book Exchange

Perhaps the most spectacular feature of the various community activities to improve libraries was the "One new for five old books" campaign, a six weeks' drive to get dog-eared primers and 1910-vintage agricultural reference books off the shelves and to replace them with new, well-chosen and well-printed books attractive to children and adults. As a part of the MCHP the Foundation agreed to give one new book to village and rural school libraries for every five old books turned in. Eager to have modern libraries, communities worked together throughout the entire area, their enthusiasm whetted by favorable publicity given the movement by local newspapers and through word-of-mouth promotion by school pupils.

Literally thousands of school children worked in the drive and a common scene was that of their loading of many volumes of dilapidated books into caravans of trucks which conveyed the books to storage piles for later conversion into scrap paper. (The proceeds of scrap paper sales were given to county library funds.) The campaign, conducted by the communities almost with the air of a zestful fiesta, assisted 905 rural, village and special schools and public libraries to meet their needs for better libraries. A series of Book Fairs conducted by community agencies was also held in the counties with outstanding librarians acting as consultants. These Fairs attracted nearly fifty thousand people and aided teachers, librarians and lay people in the selection of new books to replace the old. Interlibrary exchange lists gave the books wide circulation and some of the counties were stimulated to add bookmobiles to distribute books to the remotest parts of the counties.

#### Other Foundation Library Assistance

The influence of this renaissance in libraries resulted in a southwestern Michigan demand for facilities to prepare teacher librarians for school and community libraries and to train teachers to assume part-time librarian functions in rural schools. To aid in meeting this challenge, the Foundation made a grant to Western Michigan College for the creation of a Department of Librarianship. The Department was established with a four-year curriculum to train librarians and a further purpose to stimulate the development of libraries and library services. Such services helped to develop in children a love of reading and respect for books as "windows upon life."

The Challenge of the Exceptional Child

#### SPECIAL EDUCATION

To demonstrate an integrated program of education for handicapped and normal children within a single school building, Mr. Kellogg cooperated with the Battle Creek Board of Education in the late 1920s to make possible the construction of the Ann J. Kellogg School. This school, named in memory

of Mr. Kellogg's mother, gives to each handicapped child the education suited to his needs and capacities. No one is stigmatized through segregation because of a handicap. As rapidly as practicable, each handicapped child is assigned to regular classes with hormal children so that he may adjust to the demands of a natural environment and the competition of the so-called "average" child.

As a part of its many expenditures for handicapped children and because of the pioneering features of this particular program, the Foundation has participated in the subsidization of the Ann J. Kellogg School throughout the past quarter-century. The combined expenditures of Mr. Kellogg and the Foundation for the school have been in excess of \$580,000, including



As a part of the Special Education program at the Ann J. Kellogg School, facilities are available for physiotherapy and supplementary medical treatment. Shown, right, is a child using a device to encourage muscular coordination. At the table is a student taking a test of manual dexterity. At front center is a student-patient receiving a heat treatment and at the left-rear a teacher and student join forces toward speech correction. The illustration at the center left is of a nurse and a therapeutic device aiding a child.

\$400,000 toward construction and alteration costs. Because of the nature of the school's program, Foundation subsidies have also been provided for special teachers for handicapped children, psychologists, a director of health education, school nurses, a director of audio-visual education and administrative personnel.

Foundation funds have been made available to the school system to transport children from all parts of Battle Creek to the school. The Foundation also assisted in establishing a school lunch program for the children. Facilities are available for physiotherapy and supplementary medical treatment. It is a policy to hold the number of handicapped children—those with speech, sight, hearing, orthopedic, or emotional defects—to a maximum of fifteen per cent of the approximate 1,000 students. The school, encompassing the kindergarten through the junior high level, is an integral part of the Battle Creek Public Schools.

#### Aid to Mentally Retarded

The plight of the severely mentally retarded child is of growing concern to people throughout the country. As an approach to the problem, the Foundation is assisting the Michigan Demonstration Project for the Trainable Mentally Retarded. In this cooperative program between state and local agencies, emphasis has been given to organizing and developing plans within a community to care for and train its own severely mentally retarded children and youth. Three types of centers have been established: the first to serve a group at different age levels in rural areas; the second to serve preschool-age children and their parents; and the third to develop procedures for training and job placement of adolescents and young adults over sixteen years of age who are residents of the community but excluded from the public schools because of their being adjudged "uneducable."

The project centers, located in three different communities, have had the cooperation of the Michigan State Departments of Social Welfare, Health, Public Instruction and Mental Health as well as many parent groups and local governmental and educational agencies. The act of participating in this group approach has broadened the outlook of the parents beyond the problem of their own child. A training program and a pattern of local and state support are gradually evolving from this project, which seeks to extend humane care, and to increase the economic usefulness of these children and youth.

#### Health Education for the Nation's Youth

#### THE SCHOOL-COMMUNITY HEALTH PROJECT

A wartime program financed by the Foundation in Michigan in 1942, and designed to attract young people to enter the various health fields, gained recognition as a means of logically incorporating the teaching of health into the school curriculum. This School-Community Health Project, developed cooperatively by the Michigan Departments of Health and Public Instruction, sought to make greater use of existing resources—particularly local resources—in the teaching of health and in acquainting young people with the opportunities in the health services.

The program evolving in Michigan attracted wide attention and, after an appraisal of the achievements, the state departments of health and education of twenty-three other states secured assistance from the Foundation for coordinated statewide programs to improve the teaching of health in the public schools. By 1945 the School-Community Health Project had taken a wide variety of forms and had provided a rich yield of experiences in new techniques for teaching health. A major premise was that of the integration of the subject of health into most learning experiences of school children rather than to confine such discussions to health education classes. The essentials of the project were delineated in a Foundation-published book (1950) titled An Experience in Health Education. This book is now out of print but reference copies are in the Foundation's library.

Of the Project's influence and accomplishments—not all of which were innovations—only a few can be recorded here: the development of health councils to coordinate the teaching of health at both the state and local levels; the revision of health education curricula in many school systems; the bringing of school and community closer together. A principal contribution of the Project was its impact upon the preservice and inservice preparation of teachers through a revision of the curricula in teacher education institutions.

The Foundation made three-year grants totaling \$621,694 to the twenty-four states and, in five states, additional three-year grants totaling \$425,714 were made for projects having as their particular emphasis the training of teachers. The Foundation's funds were used in each state to defray the expenses of the offices of a state coordinator, to help underwrite the costs of workshops and for consultant aid. In the five states receiving extended aid, Foundation funds supplied the salary and expenses of a college health coordinator for each of the several teacher-training institutions involved.

#### Aid to Mothers and Babies

#### HOME MATERNITY AND INFANT CARE

In the early 1930s, only about forty per cent of the babies born in the Michigan Community Health Project area were delivered in hospitals. Desire for the improvement of the care of non-hospital babies motivated the communities to develop specialized nursing services emanating from local hospitals to assist physicians with the delivery of babies in the home.

The Foundation, in agreeing to subsidize this effort for the improvement of home maternity care, saw it only as a transitory program and recognized that, in the long range, more universal hospitalization would be the better solution. Too, it was believed that if home delivery nursing service was improved, the public would gain a greater appreciation of aseptic

techniques, the use of anaesthesia, the availability of blood transfusion equipment, the diagnostic and laboratory facilities for cases with complications, which are most readily available in hospitals. Thus it was hoped that an improvement of the pattern of infant delivery in the home would prompt many mothers to seek the evolving and still better environment of the hospital for subsequent deliveries.

During the time of the Foundation subsidy of the Home Maternity program, it simultaneously was assisting in the development of more adequate community hospital facilities. Within this period, and as a part of a national movement, there occurred a switch to almost universal acceptance of the hospital as the proper locale for the delivery of babies. Consequently, the new development which sees about ninety per cent of all births occurring in the hospital, made the Home Maternity program obsolete and illustrated how changes in technology and economics tend to redesign community services.

In the interval before maternity confinement became largely the province of the hospital, the Foundation-assisted Home Maternity and Infant Care program proved a stop-gap, quasi-solution toward safer deliveries. The efforts of this temporary program were analogous to the reasoning behind rural school modernization—until a newer pattern became more widely accepted (such as school district consolidation) improvements upon existing facilities were sought during the period of gradual transition.

As an important part of the Home Maternity and Infant Care program, nurses were given postgraduate courses in obstetrical nursing and the care of the newborn including the nursing care of premature infants. A nurse consultant assisted the home maternity nurses to improve and to coordinate their services with the program of the public health nurses in the county health departments.

Obviously, children directly benefited from improved services attendant to their births, and the counsel given by the nurses to the parents tended to secure for each infant better





A visiting nurse discusses home care with a mother.

She shows how properly to bathe a baby.

#### HOME MATERNITY AND INFANT CARE

The Foundation, in agreeing to subsidize this effort for the improvement of home maternity care, saw it only as a transitional program. It was hoped that an improvement of the pattern of infant delivery in the home would prompt many mothers to seek the evolving and still better environment of the hospital for subsequent deliveries. Fulfillment of this hope came in a subsequent change to almost universal acceptance of the hospital as the proper locale for the delivery of babies. This short-lived program was a graphic illustration of the abrupt changes which can occur in the services needed by a community.

The mother strives to follow-through on instructions.

An infant care demonstration to the entire family.





care and more wholesome food and proper medications than might otherwise have been provided. The salutary influence of the nurses was also felt in those complex home situations where there were several children in addition to the newly born.

This service, which involved Foundation expenditures of approximately \$152,000 for the period from 1937 to 1942, was widely used by the physicians in the MCHP area. An evaluation made in the program's third year of operation clearly indicated its effectiveness. The care given to mothers at the time of delivery had greatly improved. The mothers realized the advantages in terms of comfort and safety which the home maternity nursing service provided. Through the demonstration of the home maternity service and an intensive concurrent educational program, hospital and public health nurses were made more acutely aware of the need for improved nursing supervision and care of mothers and babies.

The Home Maternity and Infant Care program in the MCHP area was discontinued in 1942. Short-lived as it was, it served a transitory purpose and was a graphic illustration of the abrupt changes which can occur in the services needed by a community. The altered conditions within a relatively brief period also served to accentuate to the Foundation the necessity to be alert to changing needs and to be willing to bow out when aid to a project no longer seems necessary or wise.

Character-Building Through Work and Play

#### RECREATIONAL AND YOUTH ACTIVITIES

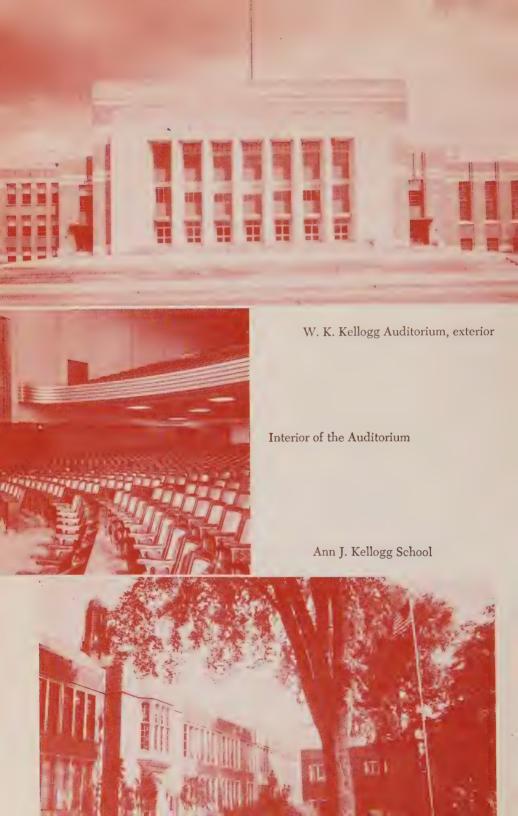
The Foundation's interest in the welfare of children and youth, in addition to embracing programs for improving educational opportunities and health services, has been expressed through its support of a number of leisure-time, character-building and recreational activities. These activities have included assistance to recreational and social services in the Battle Creek area, support to national youth-serving organizations and their local counterparts, and activities of a welfare nature.

Illustrative of the local assistance are expenditures approximating \$191,498 over a nineteen-year period for operational subsidy of a youth center in the City of Battle Creek. With funds provided by Mr. Kellogg, the building to house the center was constructed prior to the establishment of the Foundation. It was used as the headquarters facility for the area's Boy Scout Council for eight years and since 1936 has been made available to all the youth of the region. In 1950 the Foundation greatly expanded the building and deeded it to the City of Battle Creek. It now is an integral part of the city's recreational facilities and program.

During the mid-1930s, the Foundation also provided funds to construct swimming pools in two of the junior high schools of Battle Creek and subsidized the operation of these pools for a number of years.

Other local services to youth have included: assistance to the Boy Scouts and the Camp Fire Girls of Battle Creek, particularly in the establishment of camping programs; an annual subsidy since 1938 to the "Wolverine Boys' State," a citizenship training program of the American Legion; provision of summer recreational periods at camps formerly maintained by the Foundation; the furnishing of a boys' counselor through the Battle Creek Police Department; playground facilities and supervision in areas not adequately served by recreational programs; and the subsidy of many programs of local welfare and service.

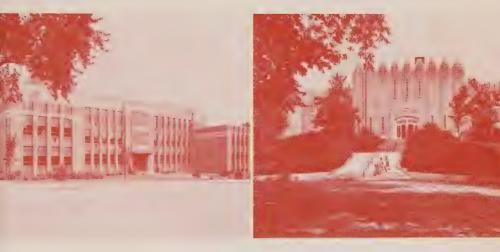
The Foundation has enjoyed many years of cooperative efforts with The Boys' Clubs of America which has been provided \$320,000 over a thirteen-year period to help to maintain its central office as well as consultant services to member clubs. The Boys' Clubs' program is concerned with the recreational, health and physical fitness of its members and concentrates on the development of constructive interests and enhancement of skills and aptitudes. For the most part, club activities are centered in the lower income urban areas. There are nearly 400 Boys' Clubs throughout the United States, with membership in excess of 400,000.



Because he had great love for his home-city, many of W. K. Kellogg's philanthropies were to aid the welfare of the children and youth of Battle Creek. Shown on the spread are some of these gifts including one of three swimming pools built by the Foundation; the Youth Center around which Battle Creek recreational programs are built; the Ann J. Kellogg School, a center for special education; the Level Park School premised on a belief that suburban schools require special integration with the larger school systems of adjacent cities; the W. K. Kellogg Junior High School; and the W. K. Kellogg Auditorium (both exterior and interior are shown) which permits large community gatherings for lectures, public debates, open forums, musical events and entertainments.

W. K. Kellogg Junior High School

Battle Creek Youth Building



Level Park School

Southeastern Junior High School





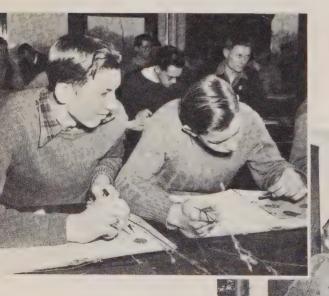
#### Developing Rural Leadership

#### AID TO FARM YOUTH

Many farm youth are being given opportunities to prepare themselves to earn better incomes and to lead more useful lives through programs assisted by the Foundation.

For a ten-year period beginning in 1938, the Foundation financed scholarships to send rural Michigan boys and girls to the Michigan State University campus for agricultural short courses. During this period, 1,675 young persons followed programs tailored to their special interests in farming and homemaking and also to give strong emphasis to health education, civic responsibility and leadership training. The records show

Since 1938, the Foundation has encouraged the use of scholarships to send rural boys and girls to college and university campuses for agricultural short courses. After ten years of Foundation finance for such scholarships, the American Bankers Association and various state bankers associations assumed responsibility for the program.



Short-course students assimilate agricultural knowledge in the classrooms and laboratories of a land-grant school.

Upon his return to the home farm, a short-course student discusses with "Dad" modern farm accounting.

that eighty-five per cent of these persons have remained on farms and that many are leaders in their communities.

The results of this program so impressed the Michigan Bankers' Association that in 1948 it assumed financial responsibility for continuing these scholarships. The American Bankers' Association has since encouraged this type of scholarship assistance in many states. To further the development of short-course programs for rural youth in other land-grant colleges, the Foundation underwrote a national conference in 1950, bringing together deans of agriculture and other faculty personnel of colleges having a responsibility for or interest in short courses for rural youth. On the basis of the interest subsequently expressed by various colleges and universities, Foundation funds made possible the exchange of personnel to assist in planning and developing such programs.

To give further encouragement to the development and expansion of short-course programs for rural youth, three regional conferences have been held and a brochure entitled *America Invests In Its Future* has been given wide distribution. The Foundation has contributed a total of \$231,924 to these farm short-course activities.

#### Aid to United Kingdom Youth Groups

Following World War I, there were organized in the United Kingdom the National Federation of Young Farmers' Clubs of England and Wales and the Scottish Association of Young Farmers' Clubs. These groups are somewhat comparable to the American 4-H Clubs but have generally a slightly older age group making up their membership.

It is recognized that in the United States the programs of the 4-H Clubs and the Future Farmers of America have been an important factor in the increased yields of our farms. Likewise, there is recognition in the United Kingdom of the necessity of involving youth in a long-range program of increasing agricultural productivity. The Foundation made commitments approximating \$334,214 to the two United Kingdom associations in 1953 and 1954 to assist over a five-year period in expanding their efforts. These associations are using this assistance to strengthen their headquarters' staffs, thus to permit additional research and developmental activities; to develop a program of greater interest to girls; to expand their program of international exchange of young farmers; to develop programs more attractive to younger members; and to promote club activities in the more remote Highland and Island areas of Scotland. Although these efforts are of relatively recent origin, their effectiveness is already evident in increased membership (in England and Wales there is a new peak of about 67,000 members) and activities in both associations.

#### Youth Learns Outdoors

#### **CAMPING EDUCATION**

Camping lends opportunities for learning that are not available in traditional classroom settings. It is for this reason that camping and outdoor education are now being developed in many sections of the country as an integral part of public school programs. Colleges for teacher education are recognizing the importance of camping programs and are providing opportunities for preservice and in-service preparation of teachers. The evolution of outdoor education to its present-day prominence is a result of the contributions of many individuals and agencies to the movement.

The interest of the Kellogg Foundation in camping began in the early 1930s when it provided assistance to special programs of three local service agencies—the Boy Scouts, the Camp Fire Girls and the Salvation Army. This interest resulted in the construction and direct operation by the Foundation of three camps at Pine, Clear and St. Mary's Lakes.



The Foundation camps allowed experimentation with camping education as a part of the public school programs. They provided educational, recreational and therapeutic facilities for children of the area. Only a few of the many features of the programs are illustrated here. Shown above is Swim-time at the Clear Lake Camp. This camp, still owned by the Foundation, is leased to the Battle Creek Public Schools for use in their school-camping program.

To the right is pictured a group interested in Nature Study, one of the many educational activities which went far beyond the usual campprogram concepts.

Shown below is a winter skating scene at the Pine Lake Camp during the period of Foundation operation as a year-round camp school for children from all areas of the State of Michigan.





All the camps were within the seven-county Michigan Community Health Project area.

Almost from the beginning, some educational opportunities were provided as a part of the camping programs. As an outgrowth of community studies of school problems, it became evident that comfortable living quarters on a pleasant lake, wholesome food, a friendly and restful atmosphere for concentration, and facilities and leadership for group work provide a setting conducive to effective learning for youth as well as for men and women.

The Foundation camps provided opportunities for experimentation with camping education as a part of public school programs. Each facility was designed with substantial, attractive, permanent buildings equipped for a capacity of approximately 150 children during the summer months and fifty children during the school year.

The camps have been used for many purposes. Through them, for example, the Foundation provided educational, recreational and therapeutic facilities for children of the area as well as education in child care for the mothers. On week ends, holidays and during summer vacation periods, the camps were also used for the continuing education activities of the Michigan Community Health Project. Little more than a beginning was made in the full use of these facilities as experimental outdoor education programs before World War II saw the camps diverted to use as training stations for the United States Coast Guard.

Following the War, the Foundation made the camps available to other agencies and partially subsidized both their maintenance and the further development of various types of educational programs. This change in policy necessitated some experimental work to determine the agencies best suited for and interested in assuming the responsibility for the continued use of these resources for educational programs. In 1947 the Pine Lake Camp was given to the State of Michigan and is now a rehabilitation center for war veterans. The St. Mary's

Lake Camp was deeded in 1950 to the Michigan Education Association and is used for a wide variety of education conferences for teachers and other education and recreation groups.

The Clear Lake Camp is still owned by the Foundation and has been leased since 1947 to the Battle Creek Public Schools. This camp subsequently has been used for the further development of a demonstration program in camping and outdoor education by not only the Battle Creek Schools but also by other school systems of the area. The Michigan State Department of Public Instruction and several institutions of higher learning have also cooperated in this effort. The agencies have made various uses of the camp to answer certain problems relative to camping and outdoor education such as curriculum content, teacher training, financing, organization and in-service training of teachers and school administrators.

Following the development of the three facilities and their respective types of programs, the Foundation provided funds for the further integration of camping and outdoor education into the school curricula of Michigan, California, New York and Washington. In 1950 the Foundation also supported the Michigan Inter-Agency Council on Recreation as a joint undertaking of the Michigan State Departments of Instruction and Conservation. By this cooperative endeavor it is thought that a more effective pattern for a state camping and recreation program is possible.

Some of the features pioneered in the Michigan program were adopted by the San Diego (California) City-County School Camp Commission and, through further development there, were eventually used by the Tyler, Texas Public Schools. These outstanding local camping programs, in turn, influenced the entire California movement, embracing a quarter of the state's schools, and camping in Texas where literally thousands of students are "learning outdoors." The ideas contributed to the development of school camping in a number of states caused the *Saturday Evening Post* to label the Foundation's

experiment as "the father of school camping" and there was similar recognition by the American Association for Health, Physical Education and Recreation.

The total of Foundation assistance to camping and outdoor education programs has been \$1,210,021.

In its efforts to aid children, directly or indirectly, to implement the natural hope of parents that the next generation will have a richer opportunity than the old, the Foundation has seen the necessity to recognize and develop leaders in the various fields which touch upon the most vital aspects of human living. Such recognition and development are dual themes of the ensuing chapter on "Education for Leadership."



### Chapter 4

### EDUCATION FOR LEADERSHIP

From its very beginning, the Foundation has been strongly influenced by the philosophic principle that leadership is a prerequisite to human progress and that the character of leadership determines in large measure the direction and rate of man's progress. Thus, in all its activities, the Foundation has placed great emphasis on people, as actual or potential leaders, rather than upon institutions or systems.

The identification of community problems and the efforts to discover and to use available resources for their solution, during the Michigan Community Health Project and later, pointed again and again to the need for developing leaders in all phases of community life. The administration of county health departments, the management of hospitals and the organization and conduct of public school systems, for example, revealed problems which suggested the need for improved leadership and better preparation for leadership. Since educational opportunities in these administrative fields have been

limited, it was natural that requests were received by the Foundation for assistance to a series of activities designed to strengthen and augment facilities for graduate education in public health administration, hospital administration, nursing service administration and educational administration. All had the basic objective of preparing people for leadership.

From these experiences in training for leadership in the field of administration has come the significant observation that the fundamental principles of administration are shared by all of these varied disciplines—that in education for administrative leadership, there is a common core of knowledge capable of application in any area of service.

Leaders must be teachers—and teachers must have the capacity for leadership. The preparation of teachers for institutions of higher learning is an essential part of the task of education for leadership, but comparatively little has been accomplished in the development of suitable opportunities for teacher training at this level. To help in meeting this need, the Foundation has aided a number of universities in the development of graduate education programs designed to meet the particular needs of teachers, especially in the fields of nursing and dentistry.

The Foundation's interest in helping to prepare leaders has been extended to include assistance to many institutions in foreign countries, where fellowships have been provided to enable young staff members of professional schools and other agencies to secure advanced training primarily in the United States, in further preparation for the positions of leadership which they are expected to assume in their respective lands.

Education and planning for effective leadership require a broad knowledge and appreciation of problems and resources. To assist in providing these tools for leadership, the Foundation has supported various evaluative studies conceived by professional groups as a basis for long-range planning and progress keyed to the practical needs and available resources of the people and their leaders.

In this review of the Foundation's first quarter-century, certain assisted activities have been grouped under the broad heading of "Education for Leadership" with the thought that such activities have true relationship to the salient objectives of identifying, preparing and aiding leaders for the attainment of richer community life.

In the pages of this chapter, those projects or programs centering on the development of administrators are discussed under a heading "Preparation for Administrative Leadership," followed by activities categorized as "Education for Teaching and Research," and then by delineation of cooperative efforts to develop "Tools for Leadership."

Improving Leadership through Education

# PREPARATION FOR ADMINISTRATIVE LEADERSHIP

The past several decades have seen remarkable strides in administrative leadership as applied to the education, hospital, nursing and public health fields. In each of these fields, the professions have centered on the development of leaders through expanded and improved preservice and in-service education. The Foundation has given assistance to a number of such leadership efforts.

### COOPERATIVE PROGRAM IN EDUCATIONAL ADMINISTRATION

Although interest in the public schools is currently accentuated and dramatized, such interest is not new. As far back as colonial times the public regarded better schools for our children as one of the greatest of challenges. Nearly a quarter-century ago, when the newly born W. K. Kellogg Foundation was aiding seven counties of southwestern Michigan in the

highly experimental Michigan Community Health Project, the citizens of these counties saw the improvement of their schools as a prime community objective. They asked and received from the Foundation aid for local efforts toward community studies of school needs, consolidation of school districts, teacher training through scholarships, school construction and modernization and short courses for school boards. And not the least significant of their activities were considerations of the problems of the school administrator.

Through the ensuing years the Foundation assisted a few local efforts to attempt solution of some of the intricate problems confronting school superintendents, principals and supervisors. These attempts were considered valuable in themselves but, naturally, the Foundation's interest in improved school administration was heightened by a proposal received in 1950 from four nation-wide educational organizations—The American Association of School Administrators, the National Association of Chief State School Officers, the National Association of County and Rural Area Superintendents and the National Conference of Professors of Educational Administration. The plan evolving from this proposal led to a national Cooperative Program in Educational Administration (CPEA) to the support of which the Foundation has appropriated more than 5½ million dollars.

#### **CPEA** National in Scope

The major idea of the CPEA involves preservice and inservice education as dual means to give school administrators greater comprehension of civic and community responsibility, public administration, pedagogy, psychology, personnel and public relations, finance, and of the many skills and attitudes needed in a job calling for great versatility.

During the initial years, the structure of the CPEA was based on eight Centers which were established at Columbia, Harvard, Ohio State and Stanford Universities, the Universities

of Chicago, Oregon and Texas and George Peabody College. These universities had proposed to redesign their programs in educational administration and to be the bases of operation for entire regions. (In subsequent years professional leaders generally have expressed the opinion that CPEA activities have served to stimulate and re-focus administrators' efforts to improve educational leadership.) Highlighting the cooperative aspects of CPEA have been the facts that 140 of the nation's colleges and universities are participating in this administrative leadership activity and that most state departments of education are actively engaged. Activities have been initiated to involve the majority of our more than 3,000 county school systems. Professional education associations are playing a prominent role, and local superintendents, principals, trustees and citizens by the thousands are parts of this concerted effort to improve educational leadership and thereby public education in our country.

It is particularly gratifying to the sponsoring educational organizations that participation in the CPEA program has involved most echelons of educational administration. Under the impetus of the program many states report that county schoolmen have periodically come together for area meetings in which "shop talk"—the interchange of information and practical ideas for improved administration—gives both the novice and the veteran a conception of what other people are doing about mutual problems and policies. Also available for guidance has been considerable literature emanating from the Centers and from other participating colleges and universities. Personnel from these institutions quite often have been used as consultants in the literally hundreds of local workshops. In some areas the colleges are furnishing personnel for on-the-job consultative services to superintendents and principals.

The social science offerings of preservice college courses and the aforementioned in-service group meetings have been widened so that the superintendent and the principal may be better equipped to work cooperatively with various groups, both public and private, without vesting authoritarian control in the administrative position. Much has been discovered concerning what communities expect of their school administrators, and training programs have been developed, the better to equip these leaders to fulfill such expectations. In all this development, the greatest gain on the part of many administrators has been an increased ability to interpret and to assist community action.

#### Characterized by Its Directness

This program for the improvement of educational leadership is characterized by its directness. Basic studies on problems of improving education through improving its administrators have been carried on and tested in practice as well as in theory. Trustees and superintendents are being helped to find solutions to problems they face. In providing this assistance, instructors in administration and their students—the future educational leaders—have gone out into communities where the problems are and have worked with the people who must be involved if solutions are to be found. The professors of education, the trustees and the superintendents have learned that the solution of local school problems must involve other agencies in a community and other people besides those holding school positions. They have also found that the university and college teachers of public administration, economics, speech and communications, and of many other subjects have contributions to make to the solution of local school problems.

#### A National System of Communications

Much interpretative literature and studies which illustrate extensive and intensive thinking about school administration have come from the many participating institutions. A national system of communications is gradually developing to disseminate the findings from these studies and involves a wide variety of devices for the exchange of information and inter-

pretation. It is increasingly clear that there is no one best way to improve school administration since administration is carried on in varying environments. While the original CPEA Centers developed several approaches to the problem, it is also true that each Center tended to give especial interest to some particular phase of improving education for leadership in school administration.

For instance, Teachers College of Columbia University has experimented with a program of internship for selected trainees who are stationed in both large and small school systems for on-the-job experience. These internships place the student of school administration face to face with real-life situations such as working with local city governments, tax boards, private agencies and welfare groups, thus giving the student a perspective on school administration as a position of community-wide leadership. Stanford University has been concerned with the problem of recruitment and selection of administrative personnel. Harvard is using the case method of instruction to train administrators to solve problems based on actual school situations. The University of Chicago has researched the development of consultative services as well as the group dynamics of effective conferences, meetings and workshops while the other regional Centers have pioneered in other and equally important directions.

Thus programs of study in many educational institutions are being revised and strengthened. Scores of professors of school administration have new facts and procedures for their courses. However, most important of all is the fact that there have been definite changes in the work attitudes of the school administrator. His morale is higher because, no longer working alone, his efforts hand-in-hand with thousands of colleagues over the nation are highlighting the strength and the inadequacies of his profession and pointing to ways of accentuation or correction. It is equally evident that the CPEA movement in every one of the forty-eight states has had the encouragement of school trustees and a considerable sector of the gen-

eral public, demonstrating a renaissance of the belief that in the leadership of the school administrator lies much of our hope for better schools for our children.

Important unsolved problems and the application of new knowledge relevant to the preparation of educational administrators are the focal points of recent extensions of Foundation assistance to approximately thirty key institutions—universities and state departments of education—participating in the Cooperative Program in Educational Administration.

During the next four years, the emphasis in each of the projects will be upon the more significant aspects of the problems of educational leadership as revealed by the spadework of the first five years of this nation-wide program. The projects will now attempt to put into greater practice the findings from CPEA studies, to continue and expand some studies dealing with professional and lay leadership in local communities, and to put into effect changes in experimental programs for preservice and in-service administrative education.

To augment the aforementioned dissemination of the results of the CPEA activities, the Foundation is financing for the American Association of School Administrators and the National Conference of Professors of Educational Administrators a newly created Committee for the Advancement of School Administration. This committee is the agency through which the two organizations will attempt to increase the use of the results of CPEA through more extensive reporting in professional meetings, in professional literature and in some of the major mass media of communications. The organizations expect to publish major comprehensive documents synthesizing the more important results of the continuing and widespread Cooperative Program in Educational Administration. Thus it is hoped that the school administrator, whether in the East, the North, the West or the South, will find increasingly available reports and information on how his colleagues in the field are coping with similar and intricate problems of school administration.

#### Canada Looks at School Administration

The U. S. school administrator, besieged with problems of finance, personnel, evolving curricula, building construction and public relations, has his counterpart in Canada. It was not strange, therefore, that almost simultaneously with the steps for improved educational leadership in our country, came a ground swell for a program of similar purposes within the nation to the North.

In 1951 the Foundation financed a conference of superintendents from the ten provinces and subsequently made a five-year commitment of more than \$270,000 to support a project of the Canadian Education Association for the improvement of school administration. During the four years that have elapsed, regional workshops and a series of summer short courses at the University of Alberta have attracted more than one-fourth of the administrators across the nation. In addition, several special studies have facilitated more effective patterns of preservice and in-service education, and practical ideas and methods are being exchanged through publications, institutes and conferences. Thus there has been brought together a fund of knowledge concerning school administration and material based upon Canadian experience.

In the stimulation of communication of educational ideas and practices between widely separated areas in the nation, there has been developed a cooperative approach to the solution of common professional problems. The impact has, of course, varied from province to province and from superintendency to superintendency, but there is encouraging evidence that the effects are strongly felt in local school systems. Increasing understanding between school people—French-speaking and English-speaking educators alike—and the trend toward local application of ideas developed in national and regional conferences points toward a new educational leadership. Such leadership is evolving toward a more liberal sharing

of responsibility between administrator and faculty and to result-getting teamwork by the trustee, administrator, teacher and school patron.

#### **HOSPITAL ADMINISTRATION**

The emergence of hospital administration as a profession has been relatively slower than the rise of the hospital itself as an integral part of the nation's health services. Despite the unprecedented increase in the number of hospitals and the expanded scope of their services following World War I, the first formal educational program to prepare hospital administrators was not initiated until 1934 at the University of Chicago. Although a second program was begun in 1943 at Northwestern University, it became increasingly obvious, following World War II, that many more administrators with formal training were needed.

#### **Established Graduate Programs**

In 1945 the Foundation made possible, through assistance to the Joint Commission on Education of the American Hospital Association and the American College of Hospital Administrators, an intensive study of educational needs in hospital administration. The further improvement of leadership in this field, through the medium of graduate education, was considered to be essential to the most efficient and maximum use of our greatly expanded hospital system. The Commission recommended that the number of training programs should be greatly increased and suggested a model curriculum based upon an analysis of the administrator's function in the hospital.

Shown on the facing page is a picture of a hospital administrator meeting with his staff. The accompanying pictograph illustrates some of the more important aspects of hospital operations. Today's hospital is a complex institution and its competent management requires a highly trained administrator. A realization of this fact has prompted the Foundation since 1945 to assist twelve programs to educate hospital administrators in the United States, Canada and Latin America.



The Foundation initiated assistance to eight universities in the Western Hemisphere to enable them to establish graduate programs for the preparation of hospital administrators. These courses, which with one exception are under the auspices of schools of public health, are located at Columbia, Johns Hopkins and Yale Universities and Washington University at Saint Louis, and also the Universities of Minnesota, Toronto, Chile and São Paulo, Brazil. In addition to the programs established with aid of the Foundation, several other universities have begun graduate instruction in this field. In this hemisphere there are now some twenty programs preparing administrators for hospitals.

The courses usually comprise one academic year of instruction, followed by a residency consisting of a year of supervised practical experience in administration in an approved hospital. The curricula are structured to give the student basic administrative skills, with strong emphasis on business management and the broad responsibility of the hospital in the field of public health. Courses in the United States and Canada are graduating over 200 students annually.

#### **Publish Conclusions of Survey**

In 1952 the Association of University Programs in Hospital Administration requested aid from the Foundation for a study of the programs of its member schools. Under the auspices of the Commission on University Education in Hospital Administration a two-year survey was undertaken, the conclusions of which were published in 1954. The report has some significant implications for the hospital administration field. An important finding was that the rate at which students are now being graduated will be insufficient to meet in future years an anticipated need of over 600 annually. The Commission also made numerous recommendations concerning revisions in the curriculum, including a greater emphasis upon administration itself; a greater dependence upon other disciplines in

the university; a larger use of case materials and a better integration of the residency with the academic program. Also stressed was the need for more adequate financial support from the university.

As a result of the survey, the Foundation approved requests for funds to assist five universities—the Universities of Chicago, Minnesota and Toronto, Columbia University and the State University of Iowa—to strengthen their programs in hospital administration. Generally, each university plans to redesign its basic curriculum and to adopt many of the Commission's major recommendations in this connection. However, in so doing, one program may place a principal effort upon the development of case materials and another upon the training of future faculty resources for the field. It is believed that, as a result of the strengthening of these five programs and through the experiences gained in the effort, there will be a general and concurrent improvement in university programs dealing with hospital administration.

#### Hospital Trustees Are Assisted

Although much has been accomplished in recent years in upgrading hospital administration in the United States, little has been done to help hospital trustees exert greater leadership in the development of expanded hospital and health services. In 1952 the Indiana State Department of Public Health, in cooperation with the Indiana Hospital Association, requested assistance from the Foundation for the establishment of an education-consultation project for the trustees of Indiana hospitals. The Foundation commitment has made possible the employment by the Department of Health of a qualified hospital administrator to consult with hospital boards of trustees in regard to their problems.

To date the Foundation has made appropriations exceeding \$938,000 for assistance to these various programs concerned with the development of leadership in the hospital field.

#### NURSING SERVICE ADMINISTRATION

In few other areas is "Education for Leadership" translated to more immediate results than in the field of Nursing Service Administration. The nation's pyramiding population, the tendency of the public to use hospitals more than ever before, the increasing complexity of patient care—such cumulative demands upon the limited-in-number nursing personnel can be met in part by improved supervision and administration.

It has been estimated that approximately 10,000 professional nurses, employed in administrative positions, are responsible for directing the hospital nursing services performed by 300,000 professional nurses, 275,000 non-professional nurses and nearly a half million nurses aides. Yet only a small per cent of the nurses holding leadership positions in our hospitals have had administrative preparation through an organized program of study in an institution of higher education—a situation calling for correction if the problems in hospital nursing services are to be met more effectively.

To assist in the development and improvement of educational programs in Nursing Service Administration, the Foundation, beginning in 1951, made commitments, totaling more than one million dollars, to fourteen universities in the nation. These funds were to improve preservice education for hospital nursing directors, assistant directors, supervisors and head nurses, to expand extension teaching for nurses to include administration courses and to enlarge in-service education to nurses employed in hospitals in the regional areas of the universities.

On the premise that administration involves thorough understanding of human behavior, the programs are placing considerable emphasis on communications and human relations skills basic to the science and art of leadership. The objectives include the formulation by the student of a philosophy of nursing, the understanding of the theory of administration, recognition of ways to develop capacities for leadership in co-workers and a competency to appraise nursing care and nursing service.



An important aspect of Nursing Service Administration is the Team Approach to Nursing. This involves various combinations of graduate, student and practical nurses, aides and orderlies. Each team member performs duties in which she is especially proficient under guidance of the leader, a professional staff nurse.



Four major activities are involved in the programs at the fourteen universities—development of a graduate curriculum in Nursing Service Administration; inclusion of administrative concepts in the general curriculum for registered nurses; emphasis in the senior year of the basic curriculum upon administrative principles and team-nursing field experience; and provision of a wide variety of in-service education opportunities for hospital nurses in the region served by the university. These continuing education activities are planned in cooperation with the nurses to be served and are designed to keep nurses informed of new developments in the field.

#### **New Findings Into Curriculum**

Various nursing service research studies—carried on by students seeking the Master's degree and by nursing faculties in cooperation with consultants from business administration, personnel administration, human relations and scientific methods management—are contributing considerable new knowledge as to how to improve the administration of nursing services. The human relations aspects in nursing service administration are being assayed at the University of Washington while work simplification studies are under way at the University of Pittsburgh. "Case methods" and "incident technique" have had the attention of both Boston University and the University of Pittsburgh. Studies made at Teachers College, Columbia University, aided development of a plan for patientcentered nursing care with the team method of assignment and short courses in team-nursing now being offered in this and several of the other participating universities.

Thus significant research findings are being absorbed into the graduate curriculum. Nursing Service Administration courses also are embracing pertinent aspects of the social sciences, recognizing the contributions available from social psychology, statistics and research, economics, industrial relations and methods engineering. Consequently, nursing service administrators prepared by the participating universities are better equipped with skills in human relations and communications which will enable them, through democratic methods, to lead hospital nursing personnel toward improved patient care.

#### PUBLIC HEALTH ADMINISTRATION

In one of the Foundation-assisted efforts to improve administrative leadership through education, there has been recognition that public health is a special field of endeavor and that formal graduate education for the personnel is eminently desirable. In a move to give separate status, the University of Michigan established a school of public health in 1941, and the W. K. Kellogg Foundation and the Rockefeller Foundation made grants to cover the cost of a building and equipment for the new school. These funds, of which the Kellogg Foundation contributed \$730,000, also were used toward the operation of the school for a period of seven years.

The new program replaced the one formerly offered by the division of hygiene and public health in the graduate school. Its expanded facilities provided services needed to meet the increasing demand for graduate training of the public health physician, dentist, nurse, sanitarian, nutritionist, laboratory worker, health educator and other public health specialists. Establishment of new departments within the school also made possible more adequate training of students interested in tropical diseases and public health statistics. An extensive program of postgraduate refresher courses was developed to keep professional public health workers acquainted with current knowledge in their field and to serve the needs of many other groups whose interests and occupations are closely related to the field of public health.

Besides graduate training, the University has provided undergraduate programs leading to the baccalaureate degrees in public health nursing, health administration and sanitary science. Research has been a major interest of most of the departments, and its cost has become a substantial part of the school's budget.

# EDUCATION FOR TEACHING AND RESEARCH

Most of us can subscribe to Henry Adams' belief that "A teacher affects eternity; he can never tell where his influence stops." In the health fields, there is a wide-spanned test of the influence of the teacher in that the quality of the preparation of the physician, dentist and nurse directly affects the care of practically all the people. Various programs assisted by the Foundation have as dual purposes the selection of professional personnel with an aptitude for teaching and the development of teaching skills through formal preparation in the art and science of teaching.

#### LATIN AMERICAN PROFESSIONAL EDUCATION

The ultimate purpose of improved professional education in the health specialties is better health services for the people. The urgent need for improvement in professional education in the Latin American countries is well recognized by the majority of their professional educators and leaders. To help in bringing about such improvement the Foundation during the past ten years has provided financial aid to the educational programs of thirty Latin American universities. Included have been thirty medical schools, sixteen dental schools, fourteen schools of nursing and two schools of public health. Assistance has always encompassed fellowships for faculty members and in many instances has included funds for laboratory equipment, library facilities, salaries for faculty members and visiting professors and for other items of the operating budget.

These professional education programs further serve as a medium for cultural exchange between the countries of the Western Hemisphere and stimulate research in the medical science and health fields. The emphasis varies with the program, and results may be achieved either directly or indirectly. For example, the project to train hospital administrators developed by the University of São Paulo is having a direct effect upon professional education. It indirectly affects the health services of Brazil by providing well-trained hospital administrators to administer health services. On the other hand, the Institute of Nutrition of Central America and Panama is making its major direct contribution through investigation and service, but it is also indirectly influencing professional education of the area.

#### **Cooperation With Other Agencies**

Foundation assistance to Latin American programs involves cooperation with other agencies, including the U. S. Department of State, its Embassies and Consulates in the various countries, the Pan American Sanitary Bureau, the Institute of Inter-American Affairs, United States and Latin American universities and professional groups and other foundations. For example, in the field of nursing education at several schools, one agency may have assisted with the building facilities, another with equipment, while this Foundation has been concerned primarily with upgrading of the faculties and/or improving the library facilities.

The Foundation prefers to cooperate concurrently in medical, dental and nursing education with the same universities when the status of the schools so justifies. There is a positive carry-over from the strengthening of professional education in one health field to the others. Also it is impossible for a nation to have good medical education without good nursing education and vice versa. Excellent examples of this approach may be found at the University of Chile and the State University of São Paulo where the Foundation is aiding at the same time the schools of dentistry, nursing, medicine and public health.

#### Fellowships Develop Leaders

The purpose of the fellowship program is to enlarge the nucleus of well-trained young professional people to serve as leaders in the further development of professional education and service in their countries. Evidence of the success of this effort has been the contributions made by these fellows upon their return. Candidates for fellowships are usually referred to representatives of the Foundation in their own countries by the deans of the schools or directors of the agencies with which the Foundation is cooperating. The requisites for selection currently include completion of the best basic training available in their countries and assurance of responsible post-fellowship positions with adequate working facilities. Equally important are a satisfactory knowledge of the English language and the general educational and cultural background and personal qualities considered necessary for an ambassador of good will from one country to another. The fellowships are granted for a period of one year, but they may be extended for a longer period if necessary. The Foundation usually provides funds for maintenance, tuition, necessary books and instruments and travel within the United States.

Fellows are placed in educational centers, usually in the U. S., which are best suited to prepare them for their professional responsibilities. In planning educational programs for fellows, attention is given to their social, cultural and professional needs, and they are provided with opportunities to travel and to become acquainted with other cultural and professional centers. Representatives of the Foundation visit the fellows regularly in the United States and after they return to their own country, and a continued interest is maintained in their professional growth.

#### **Assistance to Educational Programs**

At the present time the Foundation is giving increasing assistance to the development by various Latin American univer-

A purpose of the Foundation's assistance to the fellowship programs of thirty Latin American universities is to enlarge the nucleus of leaders in the further development of professional education and service in their countries. Evidence of the success of this effort has been the contributions made by these Fellows upon their return home from study in the U. S. or elsewhere. Shown in the top photo are four former Kellogg Fellows, now on the faculty of the School of Dentistry of the University of Antioquia at Medellin, Colombia. From left to right they are Jaime Uribe, D.D.S., Miss Dora Echeverri, Javier Echavarria, D.D.S. and Emilio Bohanini, M.D.

Below . . . Dr. Gabriel Velasquez, Dean of the newly organized medical school in Cali, Colombia, who studied under a fellowship at the Cornell Medical Center.

Right... Foundation Nursing Fellows: Miss Iris Monárdez and Miss María Galaz of the University of Chile, and Miss Zelia Machado of Brazil's University of Rio Grande do Sul. sities of educational programs directed toward the improvement of professional personnel and services in special fields. For example, assistance has been provided to the University of São Paulo, Brazil, and the University of Chile for the establishment of graduate programs in hospital administration, to prepare personnel in this important field. Also, at these same universities, the schools of nursing have been assisted in organization of teaching programs in nursing service administration.

In addition to fellowships to prepare faculty personnel, assistance to professional schools has included funds for necessary equipment and teaching materials, for supplementing faculty salaries, and for visiting professorships to provide expert consultation in the planning and development of educational programs. The Foundation fellowships are always granted in relation to specific projects for which the Foundation is providing general assistance as a part of the universities' overall plans for the improvement of professional education.

The Foundation has expended approximately \$2,300,000 in behalf of Latin American professional education. The major expenditures have been through universities and the balance through such programs as the three Institutes of Nutrition and the two Braille printing programs. Fellowships have been granted to Latin American universities and other agencies for 666 of their faculty and staff members (this figure includes those fellowships granted for the preparation of the INCAP professional staff) and the great majority of the Fellows are assuming leadership roles in the professional education programs of their respective countries.

#### GRADUATE NURSING EDUCATION

The need to prepare leaders, identified as one of the major problems confronting nursing in the South, has led to cooperative efforts in the development of a plan whereby graduate education will be provided for nurses to prepare as administrators, supervisors and teachers. Six Southern universities, the Southern Regional Education Board, the Commonwealth Fund and the W. K. Kellogg Foundation are taking part in this educational teamwork.

To help to forward the plan, the Foundation in 1954 made initial payments to the Schools of Nursing at Emory, North Carolina, Vanderbilt and Texas Universities for the employment of additional faculty, clerical assistance, the provision of instructional materials and for travel. In 1955, the Universities of Alabama and Maryland also became participants in this regional program.

Commitments to the universities total \$456,269 for a five-year period. The Commonwealth Fund is providing funds for scholarships and for a special consultant and other expenses involved in the planning and conduct of periodic seminars held jointly by the participating schools.

#### **An Entire Region Cooperates**

The program is being developed under the leadership of the Southern Regional Education Board, an interstate agency established in 1948 under a compact approved by the legislatures of fourteen states. A representative of the Board together with the Deans of the participating Schools of Nursing, comprise a Regional Committee on Graduate Education and Research in Nursing to develop policies and assure continuing regional coordination of activities.

The graduate programs are being developed jointly by the six universities and the Board in a spirit of scientific experimentation with the assistance of consultants from nursing and other fields. Through mutual agreement and to avoid unnecessary duplication, each university is developing only the specialized programs warranted by its particular clinical and educational resources. Prospective students are referred for study to the university offering their major field of interest. Together, the universities will provide strong programs of graduate education in major fields of nursing, and their coordinated efforts should place such education within the reach of interested

nurses throughout the fourteen states of the region. It is expected that the graduates of the programs will not only meet immediate needs for administration, supervision and teaching, but also will provide long-term leadership in nursing within the entire Southern region.

#### PREPARATION OF DENTAL TEACHERS

As in many fields of higher education, a fundamental problem confronting dental schools is the need for adequate preservice and in-service education of teachers. The young dental graduate interested in a teaching career can obtain adequate training in a specialty, but he has little or no opportunity for formal preparation in the art and science of teaching. Similarly facilities for in-service education to enable dental teachers continuously to improve and revitalize their pedagogic methods are relatively undeveloped.

Recently increased interest in this problem, among the dental schools, led in 1950 to the organization on a regional basis of periodic in-service conferences on dental teaching for the faculties of the Pacific Coast and Eastern schools. These regional conferences, made possible by financial assistance from the Foundation, have served to focus attention on the in-service education needs of dental teachers and may stimulate the development of continuing programs to meet these needs.

In addition, an experimental graduate program was established in 1952 by the University of Michigan, with the aid of the Foundation, for the preservice education of dental teachers. The curriculum, which supplements the existing graduate courses in the specialty fields, has been designed to meet the particular pedagogic needs of graduate students seeking to prepare for teaching careers.

It is anticipated that these projects may establish a pattern that will stimulate widespread interest in the continued improvement of dental teaching, enabling future graduates to render a higher quality of dental health service for the public.

# AGRICULTURAL LEADERSHIP PROGRAMS IN THE UNITED KINGDOM

As a rising population presses heavily on the food supplies of the United Kingdom, an agricultural self-sufficiency becomes increasingly fundamental to the economy of the Kingdom and the welfare of its people.

Among measures being taken to help increase agricultural production in the United Kingdom is a fellowship program, first supported by the Foundation in 1953, which is enabling promising young agriculturists to study at the graduate level in the United States. With an auxiliary purpose of furthering international understanding, the program has aided in providing trained agricultural research, teaching and extension personnel to the United Kingdom which has gone far in the development of its agricultural resources but recognizes the critical need for continued increase in its agricultural productivity. The exchange of information and training of technical personnel in the United States is expected to be of aid in the further advancement in this effort.

Cooperating agencies which select and recommend prospective fellows include the Ministry of Agriculture, Fisheries and Food (England and Wales); the Department of Agriculture for Scotland (in conjunction with the East, West and North of Scotland Colleges of Agriculture); the Ministry of Agriculture for Northern Ireland; and the Agricultural Research Council. Thirty-two fellowships were provided during the 1953-54 year and twenty-four during the 1954-55 period. Most fellowships are for one year at the Master's level; others, however, are for varying periods at a higher level.

#### **Scholarships for Young Farmers**

The Foundation, in cooperation with the Nuffield Foundation of England, also provides scholarships to enable young farmers from the United Kingdom to study current agricultural methods and practices in the United States and Canada. Schol-



In the long-range development of any program in agriculture, it is essential that youth be involved. In the United Kingdom not only do Foundation-assisted projects aid fellows and scholars to secure better agricultural training but, also, assistance to Young Farmers' Clubs in England, Scotland and Wales helps to further the teaching of good citizenship. Shown is a club meeting at Maidstone, Kent, England.

ars are selected by the Nuffield Foundation in cooperation with the farmers' unions of England, Wales, Scotland and Northern Ireland. It is anticipated that these scholars, as community leaders, will contribute to improved relations between the United Kingdom and the United States and will serve agriculture through discussion and demonstration of new methods and techniques observed.

The educational experience for these scholars, arranged primarily by the U. S. Department of Agriculture, includes visits to land-grant colleges, packing plants, markets and other points of interest in the United States. A large portion of the scholar's time, however, is usually spent living and working with progressive families actively engaged in successful farming of the type with which the visitor is concerned in his home country.

Fifteen scholarships have been awarded since this program was inaugurated in 1953. Up to the present, the expenditures of the Foundation for the support of this program total \$31,124.

Progress Requires Dynamic Planning

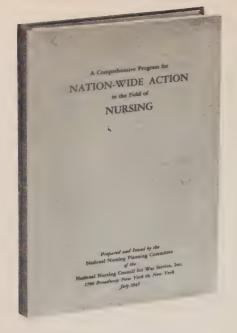
#### PROVIDING TOOLS FOR LEADERSHIP

The health professions are becoming increasingly aware of the necessity for continuous appraisal of their problems and resources in the light of new information and evolving conditions. The resulting broad knowledge — formed through the activities of professional organizations, studies and reports of commissions, surveys and consultative programs and planning on a regional or national basis — provides tools for leadership and a basis for long-range planning and progress.

#### NATIONAL NURSING ORGANIZATIONS

In any profession, an effective "tool for leadership" is a dynamic professional organization. Since 1943, the Foundation has made grants of approximately one-half million dollars to aid national nursing associations in the development of programs designed to meet the needs of the profession and the public whom it serves. The first grant was for assistance to the National Nursing Council for War Service, an agency organized for the purpose of coordinating all war efforts relating to civilian and military nursing and comprised of representatives of national nursing associations and federal nursing agencies.

This Council provided leadership and guidance to national, state and local groups in activities concerned with nurse recruitment, procurement and assignment and the inauguration of various educational programs for nursing personnel. The many studies sponsored by this agency have contributed significantly to the progress of nursing in this country. A Comprehensive Program for Nation-Wide Action in the Field of Nurs-



The publication to the left served as a blueprint to the national nursing organizations as they charted a course for improvements in the profession of nursing.

ing provided a blueprint charting a course for future improvements in the nursing profession. Many of the suggestions, such as the development of a unified national program of accreditation, have become a reality. Others, such as differentiation of the functions of professional and non-professional personnel, are still evolving.

#### **Nursing Associations Consolidate**

When the nation reconverted to peacetime activities after World War II, the Council disbanded, and its activities were taken over by the newly created National Committee for the Improvement of Nursing Services. Beginning in 1949, the Foundation provided partial support for this Committee which had as a primary objective the development and improvement of nursing services through regional conferences, institutes and consultation services. In 1953, the several national nursing associations consolidated into two organizations, the National League for Nursing and the American Nurses' Association. At that time the functions of the NCINS were transferred to the Department of Hospital Nursing Services within the National League for Nursing.

The Foundation's support for the Department of Hospital Nursing Services continued through 1955 during which time a major effort was directed toward building membership and strengthening state and local programs. The most recent activity under this commitment was concerned with the provision of teacher training courses for nurses who will develop organized educational training programs for the nearly half million nurses aides employed in hospitals throughout the United States.

Assistance by the Foundation to these national nursing groups has made it possible for them to give impetus, counsel and direction to the development of national movements of significance in the nursing profession. They have also provided leadership in interpreting nursing to other professions and to the general public.

#### HOSPITAL CARE AND HOSPITAL FINANCE

The growth of our American hospital system has been on the basis of expediency rather than a clearly developed plan. While hospitals in some form have existed for centuries, it has only been in the last fifty years that their services have consisted of more than rudimentary medical and nursing care, housing and feeding of patients. The more than 6,000 hospitals in the United States today are increasingly complex institutions because of the need to keep stride with the monumental advances of medical science—and the growth in the number of hospitals and the scope of their services has emphasized the need for study of factors involved in improving patient care.

The American Hospital Association, early in World War II, realized that it was likely the nation would initiate an unprecedented postwar hospital expansion program. To suggest an orderly method for the development of such a program, the Association sponsored in 1944 the formation of an independent study group, the Commission on Hospital Care. Its twenty-two members represented the principal health fields,

labor, industry, agriculture, education, government and the general public. The Foundation contributed \$35,000 toward the cost of the study, and like amounts were given by the Commonwealth Fund and the National Foundation for Infantile Paralysis. Further to assist the various states in their study of the recommendations contained in the Commission's report, the Kellogg Foundation contributed an additional \$20,000.

The report of the Commission, published in 1947 and entitled Hospital Care in the United States, outlined in broad terms certain recommendations for the further development of our hospital system. Urging that the regionalization of hospital services (the integration and sharing of facilities and cooperative activities by hospitals of a region) was essential for the improvement of patient care, the Commission also suggested how such regionalization might be effected. It further provided a guide for the planning of hospital facilities, and this guide was subsequently used by every state in the country in connection with Public Law 725, the federal Hospital Survey and Construction Act.

#### Study Cost of Hospital Care

Another area of real concern to the American Hospital Association was the increasing costs and complexities of hospital care following World War II. To "... study the costs of providing adequate hospital services and to determine the best systems of payment for such services" the Association sponsored the formation of an independent Commission on Hospital Financing, a group of thirty-five leaders from various segments of the American public. Its two-year study dealt with three principal areas: Factors Affecting the Costs of Hospital Care; Financing Care for Non-Wage and Low Income Groups; and Prepayment and the Community. These subjects are comprehensively discussed in a three-volume report, Financing Hospital Care in the United States, published in 1954-55. The Foundation contributed \$100,000 to the cost of this study which also had financial aid from several other foundations and agencies.



A small segment of the surveys, evaluations and resource materials emanating from Foundation-assisted programs. These and related publications were financed in whole, or in part, by Foundation appropriations.

#### SURVEY OF MEDICAL EDUCATION

In the late 1940s leaders in the profession made plans for a reappraisal of the nation's system of medical education. They had observed the rapid growth of our hospitals, the rising standards of patient care and the large number of new health service problems created in the wake of World War II.

Subsequently a national survey was initiated in 1947 by the Council on Medical Education and Hospitals of the American Medical Association and the Association of American Medical Colleges. The purposes of the survey were to evaluate present medical education activities and to redefine the broad responsibilities of such education. Major areas of study were premedical education, undergraduate medical education and internships and residencies and postgraduate medical education and community relationships. In 1950 and 1951 the Foundation contributed a total of \$52,085 for support of the graduate and postgraduate aspects of the study.

In 1953 the survey was completed and the findings disseminated to the profession and to segments of the general public. Among the 200 recommendations for the improvement of medical schools was a suggestion for a clearer definition of medical education, with some concern expressed over the problems created in some medical schools because of their expansion into medical centers. It was recommended that first priority be given to the effect of such programs on educational opportunities for the medical student. The medical student was seen as the focus of all activities and policies of the medical school, and there was agreement that the assumption of responsibility for all internship, residency and specialty training was secondary to meeting undergraduate objectives. The report also called for more experimentation and for additional research in medical education.

## CANADIAN DENTAL SCHOOLS SURVEY AND CONSULTATION PROGRAM

For several years the Foundation has provided assistance to the five dental schools of Canada to strengthen their teaching staffs through faculty fellowships and, in two of the schools, to develop programs of continuing education for practicing dentists. Concurrently, the Canadian Dental Association, through its Council on Dental Education, has done much to facilitate exchange of ideas and coordination of activities between these widely separated schools.

To promote this relationship, to develop national standards and to stimulate further progress in dental education in Canada, the Association in 1950 established, with financial assistance from the Foundation, a program of evaluation and consultative services for the dental schools. A team of consultants visited each of the schools in 1950-51 to review and discuss with the dental faculties and university officials all aspects of their dental education programs.

Formal reports and recommendations were submitted to the universities by the survey team, following these visits, as a basis for changes and improvements that would enable each of the schools eventually to qualify for national accreditation, according to standards adopted by the Association at the beginning of this program. Follow-up visits by the team revealed that the physical facilities of all the schools have been improved, faculties strengthened, curricula reorganized, research activity increased, hospital relationships strengthened, and in some instances, additional financial support has been secured.

#### REGIONAL PLANNING FOR DENTAL EDUCATION

In many parts of the United States and Canada there exists a serious imbalance between the public demand for dental services and the supply and distribution of professional personnel. Twenty-three of our states and six of the Canadian provinces are without dental schools, and an even greater number lack facilities for training auxiliary dental personnel.

This problem has served to accentuate the need for regional planning and cooperation in dental education, as well as in other fields, to insure a continuing supply and equitable distribution of dental personnel. A good example of interstate cooperation based on this concept is the Southern Regional Education Board, through which fourteen Southern states are combining and coordinating their efforts to provide adequate

educational facilities for the people of their region. Similar regional compacts have been established recently in the Western States and in New England, and there are other areas of the United States and Canada in which regional planning for education is receiving serious consideration. In addition to the coordination of educational resources made possible by regional organization and planning of this kind, much unnecessary duplication of facilities and overlapping of effort, with resultant economic waste, can be avoided.

To encourage further regional planning for dental education, the Foundation in 1953 provided assistance to the University of Alberta for a conference of university authorities, government officials and dental leaders from the four Western Provinces of Canada to consider the education and personnel needs of that region. Partly as a result of this conference, plans are now being made for additional educational facilities to help meet acute dental personnel needs of this area.

More recently, the Foundation has also provided assistance in the United States to the Western Interstate Commission for Higher Education, and to the University of Colorado, for studies of the dental education needs of the Western States and of the possibilities for establishment of a dental school at the University of Colorado. Eight of the eleven states comprising this region are without a dental school, and it is anticipated that regional planning through the Commission will lead to the improvement and expansion of dental education facilities for the people of this vast area of the United States.

The ultimate aim in the development of leadership is, of course, the expansion and improvement of services to the community and the people therein. It is evident that in the philosophy of many people the self-help principle is deeply ingrained. Aided by improved leadership, the average citizen has evidenced a desire for a better life and a willingness to seek education to make that better life possible. That is the theme of the following chapter, "Education for Service."



### Chapter 5

### EDUCATION FOR SERVICE

In most of the Foundation-assisted efforts to improve community life, both professional and lay people have had definite ideas as to what their problems were and what they wanted to do about them. They have viewed the major purpose of the programs as that of meeting community needs through improved services at the local level. And they have seen education as the logical means of improving the supply line for these services.

During the approximate fifteen years of Foundation support to the Michigan Community Health Project, the citizens saw as particularly important the adult education program for all people who had anything to do with the health, the schools, the recreation or the welfare of the community. Such continuing education was not concentrated on any one group but was made readily available for the various professional personnel and numerous lay groups. The minister, physician, lawyer, editor, merchant, school superintendent, salaried worker, the farmer and the housewife agreed that for effective participation



The construction of the building for the University of Michigan School of Public Health was financed jointly by the W. K. Kellogg and Rockefeller Foundations. This graduate school is a strong factor in the area's education for service.

in a movement to uplift the community, each needed additional information and training. Even with the subsequent enlargement of the scope of Foundation aid to national and international fields, a premium has been placed by program participants on "Education for Service."

Particularly has an emphasis been placed on preparation through increased training because of the impact of the social sciences. Resulting new concepts of the factors influencing community life—leadership, resources, motivation, cooperation and evaluation—have caused professional and lay people alike to "brush up" on newer methods and thinking through seminars, short courses, extension work and, in some cases, extended periods of advanced education. Thus people are

becoming better prepared for their roles as leaders and participants in community affairs.

The efforts of the individual citizen to improve his knowledge have caused him to observe that there needs to be closer cooperation and improved communication between the various service agencies in his town or city—the county and city health units, the school system, the churches, the welfare agencies. There is evidence of a favorable climate for this effort in the willingness of most communities to use expert aid and counsel from wherever it may be available. This attitude has led the Foundation to assist projects at all levels where such assistance would tend to improve the resources available to local communities and favorably influence the living conditions of the average citizen and his family.

The Foundation, in recognizing the desires of citizens for increased community services and for widespread continuing education to make the services more effective, has given aid to various related projects within its twenty-five year span. Thus in this chapter, "Education for Service," is shown as a composite of the subject areas—Advanced Preparation for the Health Services; Preservice Training for the Health Services; The Training of Personnel for Auxiliary Services; Continuing Education for Community Service and Communications—similarly named in subsections of the chapter.

The Doctor, Dentist, Nurse, Go to School

## ADVANCED PREPARATION FOR THE HEALTH SERVICES

With the growing complexity of social problems, there is particular responsibility accepted by the health professions for the rendering of improved community services. The physician, dentist and nurse—confronted by problems which require fast yet judicious solving and with an awareness of the



(Above) The W. K. Kellogg Institute of Graduate and Postgraduate Dentistry constructed at the University of Michigan through Foundation aid.

Assistance by the Foundation to ten dental schools in the U. S. and Canada has encouraged the development or expansion of graduate and postgraduate education programs including short refresher courses, graduate training in the dental specialities and widespread extension courses.



Below (left) A typical post graduate dental demonstration.

(Top Right) The 18,000 mile telephone extension network, a joint project of the Foundation and the University of Illinois College of Dentistry, now broadcasts panel discussions to more than 250 dental groups in 243 cities of the United States and Canada.

(Lower Right) Intra-mural, closed-circuit television is used by the University of Illinois College of Dentistry to further graduate and postgraduate dental education.



evolving of more modern techniques and newer preventive services—take a look at the roles they are to play in community betterment and often conclude that additional preparation of an advanced type will be necessary if they are to do the kinds of jobs they want to do. In many such cases, the Foundation assumes what it believes to be a proper role—that of providing financial assistance so that selected health service personnel may obtain the advanced training desired.

### GRADUATE AND POSTGRADUATE DENTAL EDUCATION

The practicing dentist's need and desire for continuing education, to enable him constantly to improve his service to his patients, became evident to the Foundation during the early days of the Michigan Community Health Project. To assist the cooperating dentists in this project to provide more and better dental health care, especially for children, short post-graduate courses were arranged to nearby dental schools. The dentists' response was so enthusiastic that the Foundation in 1939 enlarged its assistance to provide \$541,268 toward the costs of construction and support of the Institute of Graduate and Postgraduate Dentistry at the University of Michigan, which has since served as a center of continuing education for dentists from all parts of the United States and other countries.

After World War II, there was a greatly accentuated demand for postgraduate study by dentists returning from the Armed Forces. Because of this, and in the light of the experience in Michigan, the Foundation extended assistance to ten other dental schools in the United States and Canada for the development or expansion of graduate and postgraduate education programs. The various types of activities developed by one or more of these schools have included short refresher courses, graduate programs for training in the dental specialties and extension courses making use of both telephone and television facilities for teaching purposes. At one of these

schools, a telephone extension program offered as an annual series of panel discussions provides instruction on recent advances in dentistry to practicing dentists in all parts of the United States and Canada.

Expenditures by the Foundation for support of these various programs, including that at the University of Michigan, have totaled nearly one million dollars. Meanwhile, many other universities have initiated similar activities in this field, so that opportunities for continuing education are now available to dentists in almost every section of the country, with resultant improvement in the quality of dental service being provided for the public.

### GRADUATE AND POSTGRADUATE MEDICAL EDUCATION

In the seven counties of the Michigan Community Health Project, the medical societies were important in the appraisal of the health situation. These societies concluded that an augmented program of services could only be possible if the family physicians would agree to carry on the clinical services ordinarily rendered by health departments. Through their societies, individual physicians accepted the increased responsibility but, in doing so, many expressed the need for additional training if they were to render optimum benefits to the children and adults of the communities.

At the time, there was a comparative dearth of any real facilities to bring postgraduate or continuing education to these groups. The interest of the physicians and their communities, financial aid from the Foundation and cooperation from a number of educational institutions, eventually provided many courses of great practical benefit. Included were numerous short courses having "refresher" and new content emphasizing maternal and child health, the diagnosis and treatment of communicable disease, preventive pediatrics and, later, information on new diagnostic laboratory and X-ray procedures. These

were supplemented by periodic seminars in each county through which members of medical school faculties visited local hospitals to discuss medical problems.

### Review Post-War Problems

These postgraduate medical activities received Foundation support until 1942 when aid to the supplementary programs of the MCHP—prenatal visits, infant supervision, preschool and school physical examinations and immunizations, tonsillectomies, diagnostic laboratory procedures—was discontinued.



Bedside teaching, whereby members of teaching staffs discuss problems of patients with practitioners in hospitals of the area served by the university, has become an effective part of postgraduate medical education.

In 1944 a committee of the Association of American Medical Colleges reviewed looming post-war medical education problems with the Foundation. Medical educators were aware that the wishes of returning medical military personnel for advanced training opportunities would, at the close of hostilities, create a heavy burden for the medical schools of the country.

With such recognition of the coming problem, this committee surveyed the field for strategically located schools capable of a substantial increase in their capacities to accommodate graduate and postgraduate students. The Foundation agreed to cooperate financially in this expansion and, beginning in 1945, made a series of grants totaling more than two million dollars to twenty medical schools, seventeen in the United States, two in Canada and one in Mexico.

Although these Foundation grants were made primarily to provide the additional faculty necessary to serve the demands of the large number of returning veterans, it was recognized that this was a temporary situation. During the period immediately following the war, thought was also given by the universities to the development of new educational techniques and a permanent continuing program for the profession.

### Universities Decentralize Postgraduate Education

To reach the practitioners not participating in the courses at the medical schools, several of the universities began to decentralize their postgraduate educational program. Some of the activities were transferred from the teaching centers to the hospitals used by local physicians. Intensive courses of one or more days in duration, based on surveys of the needs and desires of the profession, were held in these outlying hospitals. Informal conferences, as well as clinical discussions at the bedside of the patient, were emphasized. A concurrent expansion of the use of laboratory and X-ray departments in small hospitals facilitated discussions of the use of these services in diagnosis and treatment.

Intern and resident training programs were included in the trend toward decentralization in seven of the twenty medical schools. These institutions made agreements with regional hospitals to improve the training of the latter's house staffs. The university accepted a part of the responsibility for such training by rotating interns and residents between the outlying hospitals and the teaching hospital of the medical school. Also,



Open-channel television is being used by the University of Utah School of Medicine to beam a series of early morning TV programs to physicians of the university area. The programs, concerned with such subjects as rheumatic fever, heart disease, cancer, endeavor to keep the physician up-to-date with recent advances in the diagnosis and treatment of disease. Kinescopes of the programs have been made available to other medical schools of the United States, with resultant wide coverage from this particular phase of graduate and postgraduate medical education.



Audio-visual kits — consisting of a slide-viewer, Kodachrome slides and a phonograph record — are another medium used by the University of Utah to facilitate postgraduate medical education. Mailed on a loan basis, the kits reach very isolated areas where only one or two physicians may be located and with no easy access to medical meetings. This device permits the study of programmed cases at leisure.

the medical school assumed responsibility for general supervision of the training program and especially for concentrated courses in the basic sciences during the time the student was assigned to the teaching institution.

Since graduate and postgraduate education activities required considerable administrative effort on the part of the medical school staff, it was necessary for some institutions to establish separate graduate and postgraduate departments.

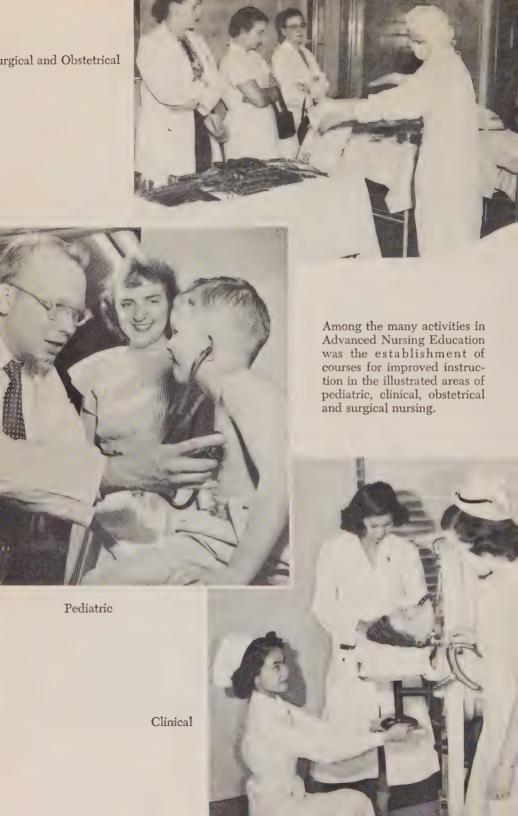
### Continuing Education Spotlights Advancements

The universities are continuing to search for new and better methods in continuing education and ways of bringing advancements in medical knowledge to the local practitioner. There has been an improvement in program planning and content as well as method. One school recently began using open channel television to reach a large number of physicians in isolated areas. This school is also experimenting with educational kits containing a projector, a series of color slides on a medical subject and synchronized long-playing records. These kits are circulated by mail to physicians in remote rural areas.

One of the objectives of the Graduate and Postgraduate Medical Education activity was to determine whether such programs could be adequately financed. From their experience the institutions have found that expanded postgraduate education services can ordinarily be financed through a combination of tuition charges, medical society support and the regular medical school budget.

### ADVANCED NURSING EDUCATION

At the end of World War II, university schools of nursing in the United States and Canada recognized their inadequacy to meet the increased educational demands of nurses who had served with the military forces or in civilian positions during the War. The greatest demands were for advanced preparation in such major clinical areas as maternal and child care, medical,



surgical, psychiatric and communicable disease nursing. There were also requests for courses in administration, teaching and in nursing supervision.

To help in meeting this need, the Foundation during the period of 1944 through 1952 expended more than \$822,000 to assist ten university schools of nursing in the United States and two in Canada to develop or strengthen advanced clinical nursing programs. These funds were used for additional staff, consultation service and instructional materials. The development of these programs also included such activities as (1) improving and increasing the resources for field practice, (2) the evolving of courses in personnel administration and guidance, (3) preparing nurses to teach practical nursing students,





and others. In addition, nursing demonstration units were established in selected hospitals and rural agencies, and attention was also given to improvement of instruction in the sciences and to the provision of in-service educational opportunities to nurses employed in the regional areas served by the several universities.

The faculties were motivated to revise the programs for graduate nurses and to apply experimentally to the undergraduate curricula the instructional methods used in the new programs. Throughout these activities, the nursing faculties greatly increased their use of the contributions of related disciplines and the total resources of the respective universities in curriculum development, evaluation and revision.



## PRE-SERVICE TRAINING FOR THE HEALTH SERVICES

Undergraduate programs in the health fields here to be sketched are fully as important to "Education for Service" as are graduate and postgraduate education activities although, of course, their translation to service to the community is not as immediate. The students in these programs represent, as it were, reserve corps in the never-ending efforts of the professions to bolster the health and cultural foundation of the American community.

### THE TEACHING OF PREVENTIVE MEDICINE

The patient, rather than his illness, has become the center of attention in medical teaching. This more comprehensive concept of medical care is serving to broaden the responsibility of the physician from concentration on the treatment of the ill to inclusion of the additional duties of prevention of disease and facilitation of the eventual return of the patient to his normal place in society.

Leaders in medical education agree that medical schools share this broadened responsibility. Consequently, the premise on which these schools base their teaching is that the physician in the future will spend an increasing amount of time in the care of the chronically ill, in health maintenance and rehabilitation and less time in the care of the acutely ill. The premise also contemplates that in medical practice the period of hospitalization will diminish in importance while there will be increased emphasis upon consideration of the environment of the patient including the social, economic and emotional factors which affect health and illness.

The first Foundation commitment to a medical school for the purpose of improving the course content and the methods used in the teaching of preventive medicine was made in 1952. Funds totaling \$846,471 have now been committed to eight schools for this purpose.

In all these programs an effort is being made to give the student the same degree of clinical experience with problems of preventive medicine as he receives in other clinical subjects. The inclusion of families for study, in addition to the patients in hospital wards and out-patient departments, gives the student a realistic and practical approach to preventive medicine. Participation in studies of disability, chronic illness and rehabilitation stresses the physician's relationship to community agencies which have a part to play in the solution of these problems. Emphasis upon contributions made by related health workers as well as the use of community resources for the patient's welfare serves to broaden the student's concept of his continuing responsibility to maintain health standards.

### BASIC NURSING EDUCATION

In one of its moves to meet the greatly augmented need for nurses during World War II, the federal government subsidized a program in three private colleges, Alfred, Hartwick and Keuka, in the State of New York whereby cadet nurses were recruited for training from the rural areas close to the institutions. Governmental assistance was discontinued at the cessation of the War but the colleges wished to carry on what had proved a satisfactory program both from the standpoint of the educational institutions and from that of nursing aspirants of the surrounding regions.

The colleges subsequently interested the Foundation in aiding an experiment to determine if small colleges, without governmental subsidy, could successfully recruit and prepare nurse students from home areas. These young women, through essential learning experiences within the rural environment, could then be trained to serve in the regions of the colleges.

The small institutions were liberal arts colleges able to provide adequate basic science education to nurse students. With no large hospitals in the college towns, however, a fundamental problem was to develop the proper affiliation with the type of hospital which could provide the clinical experience needed by the students.

From 1946 through 1951 the Foundation expended more than \$270,000 to aid the three colleges thus to revise and improve their basic programs in nursing education. A portion of the above sum provided a coordinator for the program. In addition to curriculum evaluation and revision, a cost analysis of the nursing programs was made in each of the colleges. Since the initial Foundation aid was extended, these programs have graduated approximately 800 nurses, a large percentage of whom have remained in the local area where they are employed in hospitals, public health agencies, physicians' offices, industrial plants and public schools.

### A Pilot Experiment in Saskatchewan

In 1952 the Foundation made a three-year commitment of more than \$165,000 to the University of Saskatchewan for the aid of a pilot experiment to establish a sixteen weeks' introductory program for undergraduate nursing students at two university centers. The hospital schools of nursing in Saskatchewan had found it difficult to develop strong basic science courses. As an alternate and in order to strengthen the program at all the schools, there evolved a unique plan for strengthening the preclinical education of these nursing students. Eight of the ten hospital schools of nursing in the Province are sending their entering students to university centers at Saskatoon and Regina for instruction in the basic sciences, nursing sciences, social sciences and English.

This evolving plan, which eliminates the duplication of resources, is being financed initially by the Foundation and the cooperating sponsors—the University, the Provincial Board of Nursing, the Provincial Government and the eight participating hospitals. The centralized program enables better instruction and equipment and richer social experience and is producing "more mature students with greater social motivation,"

better study habits and powers of adjustment, and better care for the patients." The sponsors believe the program is providing a stimulus toward the improvement of the total curriculum in the various schools of nursing of the Province.

### PUBLIC HEALTH UNDERGRADUATE EDUCATION

To meet pressing problems in the public health field, the University of Michigan has used Foundation financial assistance since 1949 toward development of undergraduate courses of study in health administration and sanitary science. Each course is a bachelor's degree program in the School of Public Health following two years of basic college preparation. The curriculum in health administration provides a broad background for the administrative activities common to both voluntary and governmental health agencies.

The addition of the course in health administration was premised on an observation that in public health work many non-medical duties now consume the time of the medical administrator. Apparently, then, it would follow that, by the use of personnel without a technical knowledge of medicine but trained for non-medical administrative responsibilities in public health departments and other health agencies, the physician can be freed to devote more time to medical functions.

The curriculum in sanitary science prepares individuals for service in the field of environmental sanitation. Recently more emphasis has been placed on community education as a means to control the environment. Consequently, preparation for this field has been broadened to include work in the social sciences.

Funds totaling \$200,000 have been committed by the Foundation for the two undergraduate programs, and these have incidentally been a means of strengthening other programs in the School of Public Health.

A subcommittee on undergraduate programs in the school has developed course content and background material for the undergraduate training. Furthermore, supervised field training has been incorporated into the program. The major problem has been recruitment because of the competition by industry for science students.

### WARTIME LOANS AND SCHOLARSHIPS

To assist the military effort during World War II, the Foundation made grants to a number of colleges and universities for the establishment of scholarship and loan funds for students majoring in the health fields. This move was to help to meet the expanding need for such personnel prior to enactment of federal legislation establishing a student training program.

The Foundation aid totaled \$2,320,700 and was given to 143





universities and colleges in the United States and Canada. The loans and scholarships were channeled by the institutions largely to students who, because of the accelerated programs of the professional schools and the consequent elimination of summer employment opportunities, did not have sufficient money to pay for the completion of their education.

The number and categories of schools (in some cases, several schools within a university) administering these funds were: medicine, 87; dentistry, 41; nursing, 60; public health, 10; occupational and physical therapy, 22; and medical technology, 51. The proportion of the funds used for loans, compared with those used for scholarships, varied considerably with the different schools. The revolving loan funds are still in operation on many of the campuses.

## THE TRAINING OF PERSONNEL FOR AUXILIARY SERVICES

The unprecedented demands of the public for health services in the post-war period have served to dramatize and underline the usefulness of auxiliary personnel in the several health fields. The overworked physician, dentist and professional nurse particularly have realized the value of these helpers whose aid increases the efficiency of the practitioners and enables the extension of their services. Because these persons are veritably "right hands" on the health team, the Foundation has considered it important to assist programs designed to expand and improve facilities for their training.

### PRACTICAL NURSE EDUCATION

During and after World War II, it became increasingly apparent that the shortage of professional nurses would be accentuated by an unprecedented demand for their services. To help to relieve this shortage, the health professions urged that national impetus be given to the preparation of practical nurses who, even with much less preparation than the professional nurse, could provide, under supervision, many of the needed services to patients in homes, hospitals and other institutions.

Since 1947 the Foundation has provided almost three-quarters of a million dollars to aid in the improvement and further expansion of practical nurse training. Accepting the philosophy of national nursing organizations that these educational programs should be under the aegis of education rather than service agencies, all commitments have been made directly to state departments of education. The programs have operated under the direction of the divisions of vocational education in cooperation with major health and civic groups.

The initial Foundation grant for a five-year period of assistance was made to the Michigan Department of Public Instruc-



Since 1946, the Foundation has provided assistance totaling almost threequarters of a million dollars for the improvement and further expansion of practical nurse training. Illustrated are two practical nurse students under the supervision of a professional instructor.

tion for the develoment of a state-wide program of practical nurse education with eight training centers in the state. A professional nurse was appointed as state supervisor to direct and coordinate the educational activities in these centers. During this period, a grant was also made to the Wayne University College of Nursing to prepare nurses for administrative and teaching positions in the practical nursing schools.

Since 1947, more than 3,000 practical nurses have graduated from the one-year training programs and have helped appreciaably to increase nursing services in the state. The experiences of the Michigan program of practical nursing have been shared with other states and with many other countries through correspondence, visits and publications.

### Augment Programs in South

Beginning in 1951, assistance for a similar purpose has been provided to the state departments of education in Alabama,

Arkansas, Florida, Louisiana, and Mississippi which, in this endeavor, have worked together on a regional basis. The number of local training programs in these states has increased from ten to twenty-eight, and the number of graduates has tripled to approximately 1,000 per year. More than one-third of the region's 12,000 licensed nurses have received instruction and supervised practice through extension courses.

Practical nurses are rapidly becoming recognized as significant contributors to the health team, and as a group they are moving into organized associations on national, state and local levels. In the majority of the states, laws have been enacted to govern the standards of education and practice of this group.

#### EDUCATION OF DENTAL HYGIENISTS

As the practical importance of the dental hygienist became more widely recognized, the demand for personnel in this aux-



The dental hygienist has established herself as a valuable aide to the dentist through her performance of dental prophylaxis, preventive services and patient education. Shown receiving instruction is a class of dental hygienists, one of several categories of auxiliary workers aiding the professions and receiving "Education for Service."

iliary field of dentistry quickly outgrew the supply. The dental hygienist has established herself as a valuable aide to the dentist through her performance of dental prophylaxis, preventive services and patient education. Increasing numbers of practicing dentists, health departments and school systems have sought the services of dental hygienists, as each of the states and territories, in rapid succession, made legislative provision for their licensure and practice.

To help in meeting the acute demand for more personnel in this field, the Foundation, beginning in 1949, provided assistance to four dental schools for the establishment of programs for training dental hygienists. Included were the Universities of Alabama, Oregon, Detroit and Toronto, the latter representing the first dental hygiene school in Canada.

Since 1948, the total number of dental hygiene courses in the United States has increased from seventeen to thirty-one, and the number of graduates has been doubled. As this remarkable progress continues, the services of dental hygienists will become much more widely available to the dental profession and the public.

# UNDERGRADUATE EDUCATION FOR MEDICAL TECHNOLOGISTS AND OCCUPATIONAL THERAPISTS

The Foundation from 1942 to 1946 supported programs to mitigate the shortages of medical technologists and occupational therapists and to improve their pre-service preparation. Assistance was initially extended to the Michigan Department of Health for expenses incidental to a newly devised curriculum in medical technology. Under this program, the Department's Bureau of Laboratories coordinates the hospital training of medical technology students with preparatory courses in several state colleges and universities. The curriculum consists of three academic years plus one year of supervised instruction

in an approved hospital laboratory, including a brief experience in the laboratories of the state department of health.

In 1943 help was given by the Foundation to the Maryland State Department of Health for a similar program. During the period of 1944 to 1950 the American Occupational Therapy Association was provided funds which made possible the employment of an educational consultant to cooperate with the various schools offering preservice training in this field.

An Investment in People

## CONTINUING EDUCATION FOR COMMUNITY SERVICE

Almost from its inception, the Foundation has regarded continuing education as an investment in people. It has believed that community leaders and the average citizen alike can work out their own solutions when given access to the best of current thought. Informal, functional adult education concerned with solving the real-life problems of people is of vital importance whether the locale be the problem-solving clinics in our university centers or extension courses in a building overlooking the town square.

Consequently, the Foundation has been willing to assist programs of continuing education wherein there are opportunity and method for people to study their problems, to learn to appreciate the wealth of their resources, to exchange experiences and to find their own answers through cooperative action. Since the mid-1930s, such programs aided by the Foundation have assisted many professional and lay people toward greater skills in professions and vocations and toward richer community and personal living.

### KELLOGG CENTER FOR CONTINUING EDUCATION

As the sweeping activities of the Michigan Community Health Project caused individuals to refocus their thinking on the potentialities of community life and their roles in the experiment, there grew a demand for continuing education to lessen the gap between "what we want to be and what we are."

Some of the early continuing education activities of the MCHP were conducted by Michigan State University and contributed to the development of continuing education at that institution. It was on this campus in 1951 that there was completed the seven-story Kellogg Center for Continuing Education financed largely through a \$1,400,000 grant from the Foundation. It was hoped that this Center would become a model for other states in providing continuing learning opportunities for out-of-school people. In less than five years it has become a Mecca for hundreds of professional, trade and agricultural groups. Each group is composed of individuals of kindred interests who come together for greater knowledge in their particular fields through an exchange of ideas and introduction to new methods. So great has grown the public demand for continuing education that the Foundation, in 1954, granted an additional \$490,750 to build an urgently needed addition to the Center.

More than 400 conferences were held at the Center in 1954 and were made up of many employed groups, professions and vocations. The structure, with overnight accommodations for 190 guests, also serves as a hotel administration laboratory for the students in the University's Division of Hotel, Restaurant and General Institutional Management.

### THE GEORGIA CENTER FOR CONTINUING EDUCATION

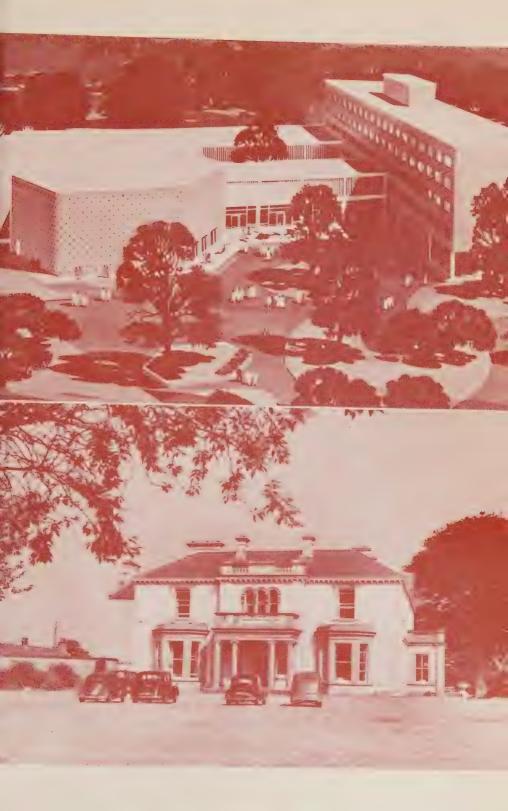
Now under construction at Athens, Georgia, is the Georgia Center for Continuing Education, jointly financed by the Foundation and the University of Georgia. This new Center will be similar in purpose and program to a predecessor assisted by the Foundation, the Kellogg Center for Continuing Education at Michigan State University. The conference facilities, exhibit

### EDUCATIONAL OPPORTUNITIES FOR ALL

Almost from its inception, the Foundation has regarded Continuing Education as an investment in people. Informal, functional adult education concerned with solving the real-life problems of people is of vital importance whether the locale be in university centers or extension courses in a building overlooking the town square.

Shown below is the Kellogg Center for Continuing Education constructed through Foundation funds on the campus of Michigan State University. On the facing page, upper right, is pictured the new Continuing Education Center at Athens, Georgia, financed jointly by the Foundation and the University of Georgia. At lower right is the 200-year-old mansion near Dublin which was purchased and rehabilitated by the Foundation as a college of continuing education for the 7,000 members of the Irish Countrywomen's Association.





and meeting rooms, dining rooms and accommodations at Athens will, in part, be patterned after those at East Lansing, Michigan, and will represent the latest thinking with regard to facilities for use in providing continuing learning opportunities for out-of-school people.

The facilities include a television station, a radio broadcasting station, and a motion picture studio with capacity to produce twenty full-length films annually. A teaching innovation will be the synchronized use of films, television and radio to prolong the opportunity for learning through programs offered both prior to and after the visits of trade, agricultural or professional groups to the campus.

As at Michigan State University, the Georgia Center will use the faculties of the University, affiliated institutions and outside resource personnel. The central administrative staff of the Center, assisted by other experts through working agreements with various schools and colleges, will carry continuing education to the remotest regions of Georgia to aid agencies and persons toward a better life. Thus it is hoped to help people to make the land more productive, to raise economic, educational and health levels, to improve housing facilities and to develop planning to lead people to assume greater civic responsibilities.

Of the total cost of \$2,590,000 for the Center, the Foundation will pay \$1,690,000 and, in addition, will assist the operating budget to a sum of \$454,000 over the initial five-year period. The State of Georgia will provide the remainder of the financing for the Center and its program.

## A SMALL COLLEGE FOSTERS CONTINUING EDUCATION

A pilot program inaugurated in 1954 at Wabash College, Crawfordsville, Indiana, is seeking to determine whether the small college can be a practical link in the extension of informal and fundamental adult education. Particularly utilizing the summer months, when small college facilities are infrequently used, the demonstration will explore the use of faculty and facility resources to provide continuing education to the many professional, trade and agricultural groups of the surrounding geographic area.

The Foundation is supplying funds totaling \$50,000 to finance for two years the employment of an adult education director, his staff and incidental operating expenses.

### IRISH COUNTRYWOMEN'S ASSOCIATION

Continuing education knows no geographic bounds. Contemporaneously with the vast movement that has led millions of out-of-school Americans to traditional or improvised campuses for adult education, so in Europe have people dynamically expressed their need to learn long after the ending of their formal education. One example across the Atlantic of this movement is the establishment of a continuing education center in Ireland by the thousands of farm women allied with the Irish Countrywomen's Association.

In 1953 the Foundation agreed to aid this Association of 360 guilds to build a program "to develop women leaders who, through services and for example, will be influential in further improvement of rural life in Ireland." The funds provided have been used to purchase and rehabilitate a 200-year-old country mansion in County Louth for service as a residential center of practical and cultural education. This center is supplementing the many kinds of continuing education through which the Association reaches Irish farm folk and influences "Better Farming, Better Business, Better Living."

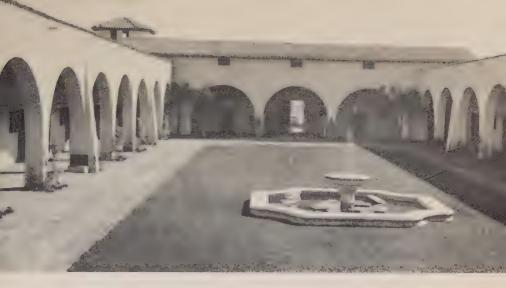
Short courses of instruction were first offered at the center during the summer of 1954, and it is hoped that some 7,000 women annually will participate in these courses which concern such things as cookery, dressmaking, craft work, home decoration and horticulture as well as the arts and the encouragement of the use of the Gaelic language. On the lighter side, this educational program of the Association seeks to pre-



### KELLOGG RANCH NOW A COLLEGE CAMPUS

The 800-acre Arabian Horse Ranch, shown below as it nestles in Pomona Valley near the California city of the same name, was for a time the winter residence of W. K. Kellogg. For a number of years, it was utilized by the University of California and during World War II, it was used as an Army Remount Station. In 1949, the Foundation deeded the ranch to the State of California for use by California State Polytechnic College as a branch campus.





Cal-Poly is currently spending \$3 million of a contemplated \$10 million in development of the ranch as a new campus. The college's planning embraces an expansion to co-education in contrast to the all-male student body of the past, and it is anticipated that 1,500 students will eventually be enrolled at this branch campus. Shown above, left, is the "Big House," former residence of Mr. Kellogg, now to be used for administrative purposes. Above, right, is a view of the Spanish-type stables, an important adjunct to the Sunday Arabian Horse Shows which have been held at the ranch for nearly thirty years.



serve and improve the amenities of the country side, notably Irish dancing, community singing, games and competition as well as nature study.

The Foundation's commitment to the Association's program—a smaller and simpler version of the continuing education activities being aided at Michigan State University and at the University of Georgia in the United States—will total approximately \$200,000 for a five-year period, with a portion of the funds to be used to meet the expenses of operation and program development. It is hoped that within three years this program will be self-supporting.

#### UNIVERSITY OF NORTH CAROLINA

Since 1949, the Foundation has expended \$48,240 to assist the University of North Carolina School of Public Health to expand its activities in continuing education for public health workers and related groups. This project was an outgrowth of the Foundation's earlier interests in similar activities carried on by the University of Michigan School of Public Health.

Refresher courses, workshops, institutes and conferences have been conducted for public health physicians, nurses, health educators, sanitarians and other staff members of health departments as well as for waterworks operators, members of local boards of health and others whose work affects the public health. Such educational programs are intended to help public health personnel keep abreast of the times in their work and also to aid lay persons in related fields to increase their understanding of community health problems and practices.

As a result of the project, the continuing education activities of the school have been strengthened. Programs for professional and lay groups will be continued under a long-range plan developed by the faculty.

## CONTINUING EDUCATION FOR HOSPITAL PERSONNEL

The need for continuing education for all categories of hospital personnel has been evident for many years. This is particularly true in regard to hospital administrators, since the great majority of this group have not had formal education for their administrative responsibilities. In 1951 the Canadian Hospital Association, in cooperation with the University of Toronto and with the aid of the Foundation, established what is believed to be the first extension course for hospital administrators.

This two-year program of home study, supplemented by two one-month summer seminars, provides by mail approxi-



In 1951 the Canadian Hospital Association, in cooperation with the University of Toronto and with the aid of the Foundation, established the first extension course in hospital administration. The map shown above illustrates the enthusiastic reception of the course by Canadian hospital administrators. Many, not having had formal preparation for their positions, have welcomed an opportunity to secure continuing, onthe-job education, an important phase of "Education for Service." Note that the lessons are mailed even to remote sections of Canada. Through the 1954-55 school-year, there were 197 students from 113 Canadian towns, ten U. S. states and four foreign countries.

mately thirty lessons which cover a comprehensive range of subjects concerned with hospital administration and the role of the hospital in the community. There has been a total enrollment in excess of 200 students, including a few registrants from other countries. Applicants to the course, who must be employed in a hospital administrative capacity, have come from both large and small hospitals and institutions representing governmental, religious and voluntary auspices.

Encouraged by the reception accorded the hospital administration extension program, the Canadian Hospital Association, in cooperation with the Canadian Association of Medical Record Librarians, launched in 1953 a similar activity for medical record librarians. The program, which has to date enrolled over 100 students, is also being partially supported by the Foundation. Since there are only five preservice medical record librarian schools in Canada, graduating less than thirty students annually, the Associations believed this important aspect of hospital service should be strengthened. As in the hospital administration course, the program is of two years in length and also requires two one-month summer sessions.

The Foundation's contribution, which has supported in part the basic expenses of both projects, will terminate in 1956. By that date, the program should be completely self-supporting.

### **Auxiliary Personnel**

As the public has made more and more use of the nation's hospitals, so has grown the need for adequate training for various types of hospital auxiliary personnel. Foundation funds to assist such training programs have largely been extended to selected individual hospitals in Michigan with the medium being in-service training scholarships for hospital employees.

Previous to World War II aid for training purposes was given to hospitals cooperating in the Michigan Community Health Project and subsequently to forty-two hospitals participating at various times in the diagnostic services improvement program. Virtually every category of hospital worker, as well as administrators and trustees, received aid to attend institutes, workshops and short courses pertinent to their activity. Some of the courses were set up especially for these auxiliary workers.

### REGIONAL IN-SERVICE TRAINING FOR NURSES

Beginning in 1950, the Foundation has provided more than \$113,000 to two universities to develop programs of in-service nursing education in rural areas. Grants to Boston University assisted its School of Nursing, in cooperation with the Bingham Associates, to institute continuing education opportunities for nurses in central and eastern Maine and western Massachusetts similar to the well-established plan for physicians in the same region. The Emory University School of Nursing, through a like pattern, has developed teaching centers in two hospitals located in rural areas.

In each of these universities the program is conducted by the university faculty through short courses, institutes and on-the-job consultation to nursing personnel of affiliating hospitals. Undergraduate nursing students and graduate nurses are able to secure experience in rural hospitals in the area served by the universities and, as a result of this experience, more of these nurses are stimulated to pursue further education. The universities and hospitals believe that the pooling of educational and professional resources is resulting in more and better education for a greater number of nurses at reduced cost and that the improved education is resulting in better patient care.

The Foundation agreed to subsidize the experimental phase of the program, and with the termination of Foundation assistance, a problem as yet unsolved is that of continued financing for these educational activities. While the participating hospitals and universities are making substantial contributions to the program, it is difficult for them to provide permanent support for a program of this scope.

### PUBLIC HEALTH FIELD TRAINING

In the early days of the Foundation when most of its activities were centered in southwestern Michigan, field experience for the public health student was a valuable dividend from the many programs developed in the Michigan Community Health Project. There was then, and still is, a need for planned field work as a supplement to the student's formal university training and to prepare him better for working with people and the problems of the community.

Because there was throughout the country a lack of opportunities for new public health workers to obtain such supervised field experience, the Foundation assisted in the development of the southwestern Michigan area as a training center. Its coordination and direction were the direct responsibility of the Foundation in cooperation with the seven county health departments. This field program not only provided training experience but also was instrumental in recruiting students for public health work. Many of those who received the experience are now holding responsible positions in public health in many parts of the country. In 1947 the direction of the program was transferred to the Michigan Department of Health.

### Twelve Health Departments are Aided

To help to develop similar training facilities in other states, the Foundation in 1945 initiated a series of commitments to assist eleven state departments of health and one provincial health department in Canada. It was hoped that through the Foundation's assistance to these programs, methods of field training for public health personnel would be further developed and that an equitable federal-state-local basis for financing this kind of activity could be established.

Financing of the field training activities, as Foundation support has been concluded in ten of the departments, has been met in part, although no national pattern for continued support is yet in existence.



Public health personnel studying sanitation procedures as a portion of their field training.

Since 1945 approximately 3,500 students have received more than 27,000 weeks of supervised field work. Not included in these totals were many persons trained for periods shorter than the usual twelve weeks of supervised field work and others who received varying types of experience. There has

been an increase in the number of professional schools which are integrating field experience into their public health curricula. The program has also resulted in a further delineation of purposes and practices for field experience in manuals relative to procedure.

In 1950 a grant was also made to the American Public Health Association to develop and apply standards for the accreditation of field training centers to meet the requirements of the newly formed American Board of Preventive Medicine. Completion of this project saw such accreditation in operation, with the responsibility for accrediting training areas for public health physicians transferred to the Council on Medical Education and Hospitals of the American Medical Association.

A Sharing of the New

### COMMUNICATIONS

The gaps between the creation of knowledge and its practical application are wide enough in many fields to be expressed in decades. Increasingly it is recognized that such gaps can only be narrowed by a drastic change in our communications so that there may be clearer channels through which new findings and techniques may be conveyed to the people. In several of its fields of interest, but particularly in education and agriculture, the Foundation has assisted programs which have as a goal the improvement of communications.

### **EDUCATION COMMUNICATIONS SERVICE**

The Foundation's grant to the University of Chicago in behalf of the Education Communications Service was assistance to a project pointed toward the professional improvement of journalists employed by teachers' magazines and thus indirectly to the professional improvement of teachers, particularly those in rural communities. This project, developed in cooperation with the National Association of Secretaries of State Teachers' Associations, began in 1945 with a workshop for the editors of

forty-four state teachers' journals. Through this meeting and those which have followed annually, editors have had opportunities to learn much concerning such aspects of journalism as reporting, readability, layout and typography.

As a result of the first workshop, a clearing house at the University of Chicago was developed to enable the editors to help one another, to receive continuing assistance in improvement and evaluation of their journals at minimum expense, and to evolve exchange and art services and syndicated "big name" articles for use in their publications. As the program developed, Canadian editors of teachers' journals were included.

An evaluation of the Education Communications Service shows that a striking improvement in appearance, both outside and inside, of the teachers' magazines has taken place since this program began. There has also been a notable enhancement of the average quality of articles. The U. S. Journals publish an average of 300 pages per year concerning the improvement of teaching, and an increase in articles on this subject has been noticeable in the Canadian journals. Consultation on production problems has offered stimulus and aid for betterment, and the attractiveness of the journals has been increased by making photographs and art work easily available.

## NATIONAL ASSOCIATION OF EDUCATIONAL BROADCASTERS

It is generally believed that educational broadcasting is potentially a major medium for communicating educational and cultural ideas to the public. Despite this belief, financial support of educational radio stations is so inadequate as to give them only a fraction of the funds available to commercial broadcasters. The problem has been, therefore, one of finding ways whereby the nation's educational broadcasting stations can evolve an economic means of providing high quality, attention-arresting programs.

Since 1951, the Foundation has paid \$286,093 to the University of Illinois in behalf of the National Association of Educa-



To reach more farmers with useful information and techniques, through improved communications media, is the goal of the Foundation-assisted Nat'l Project in Agricultural Communications.

tional Broadcasters for the mass duplication and distribution of tapes for radio as an economical method of providing programs for its more than ninety stations. Up to eight hours of carefully selected programs are available each week to the participating stations. The specific goals of the Association are to enable the broadcasters to improve the quality of their programs, to upgrade personnel and to exchange technical information. It is also concerned with the impact of TV upon educational broadcasting and is now planning possible changes in its services in order to incorporate the new medium.

## NATIONAL PROJECT IN AGRICULTURAL COMMUNICATIONS

The application of new farm techniques lags far behind their discovery through research. Economic information, unless presented very ably, tends to be abstract and seemingly quite removed from the day-to-day activities of the farmer. Without adequate technological and economic information farmers tend to make decisions about their operations on the basis of prejudice, hunch and guess work. Recognizing the necessity for improved communications to meet the needs of agriculture in the middle of the 20th Century, the American Association of Agricultural College Editors inaugurated during 1953 a National Project in Agricultural Communications. To help to initiate the activity, the Foundation made a five-year commitment of \$343,424.

From the headquarters at Michigan State University, administrators and information workers of land-grant institutions and the United States Department of Agriculture are receiving counsel as to more effective and efficient use of all communications media. The pattern is one of close cooperation with all interested professional organizations and agencies.

The relatively few pre-employment and on-the-job training opportunities in the field of agricultural journalism are a concern to the National Project in Agricultural Communications, because the profession has developed faster than have opportunities to prepare for it. A major effort of NPAC is to facilitate continuing education for agricultural administrators, editors, extension agents, county agents and volunteer workers engaged in getting information about rural life and work to people who can use it.

A small central staff is developing four broad areas of activities through organizations serving rural people. These areas are training, service, research and creative programming—by means of which new ways will be developed to transmit pertinent agricultural information to urban as well as rural audiences.

## Education through Evaluation

#### EVALUATION OF MEDICAL CARE IN HOSPITALS

The constant improvement of patient care is of universal and continuing interest. Particularly to assist hospital medical staffs in their efforts to attain such improvement, more refined and effective evaluation techniques have been needed. The Foundation in recent years has expended \$196,753 to aid several experimental approaches to the problem.

Grants made in 1950-53 to individual hospitals located in southwestern Michigan permitted their employment of a medical educator to study a representative sample of patients' records for a year's period. From this analysis of the quality of patient care, recommendations were made to the hospital trustees and medical staff concerning means of improving such care. This was an initial step toward new methods for the evaluation of medical care in hospitals.

### Gather and Analyze Factual Data

Since 1950 the Southwestern Michigan Hospital Council, an association of rural and urban hospitals, has been experimenting with a group approach to evaluation of the quality of patient care through a plan of central collection, collation and

analysis of patient care data from individual hospitals. The objective of the program, known as the Professional Activities Study, is to develop a relatively simple, practical and inexpensive method of gathering and analyzing factual data related to the care of patients. This material is used by medical staffs, hospital administrators and hospital trustees for the improvement of such care. An important aspect of the project is the uniform collection of data for each patient discharged, the data subsequently being sent on a special form to a central point where mechanical tabulation facilitates analysis. Another feature of the system is the enabling of various hospitals to make statistical comparisons of their medical activities. Assistance, if requested, is also provided by the Council to each medical staff in the interpretation of these studies as related to the individual hospital.

In addition to the values gained by the Professional Activities Study, another promising outcome is the modernization and streamlining of medical record indexing and hospital statistics provided by central mechanization and feedback of data.

### **Support for National Pattern**

In 1953 the Foundation began financial assistance to the American College of Surgeons for a project designed to develop a pattern to enable individual hospital medical staffs to audit their activities. Working in close collaboration with the Professional Activities Study conducted by the Southwestern Michigan Hospital Council, the College is using the Council's methodology as a basis for developing an even more refined evaluation technique for use by the medical staffs of individual hospitals. The College hopes that this will permit the establishment of a nation-wide system of evaluation adaptable to every hospital, regardless of its size or type of service.

#### SERVICE FOR THE BLIND AND PARTIALLY SIGHTED

The Foundation for some years has had a special interest in the problems of the blind and the partially sighted because of the blindness of its founder during the last decade of his life. Recognition of the prevalence of blindness, especially in children, and of the fact that this tragedy was often preventable led the Foundation in the early 1940s to give financial assistance to several related research projects. These included the cause and treatment of glaucoma, transplantation of the cornea in children and relationship of vitamins to ocular deficiencies.

For many years Mr. Kellogg personally contributed funds to the American Foundation for the Blind to develop its "talking books" project and, starting in 1941, the Foundation has given similar assistance. Since no more than fifteen per cent of the blind can read Braille, the recording of books on phonograph records is of great help in the entertainment and education of those who have lost their vision. These records are valuable educational tools as substitutes for textbooks and especially for nature study and music appreciation. Recordings of drama and adventure enable the blind effectively to combine listening pleasure with the securing of information. Foundation support has included funds for the establishment of a lending library of talking books at the central office of the American Foundation for the Blind.

## Aid State Preventive Programs

Beginning in 1950, grants were made to the state health departments of Oregon, Mississippi and Louisiana for the purpose of determining the extent of partial loss of vision, visual defects and blindness in these states, and as a result of the findings to formulate programs to reduce visual disability.

The Oregon program was conducted in cooperation with the University of Oregon Medical School. An analysis of several thousand medical records of patients with eye conditions was made to determine the factors which influence the success or failure of medical treatment. As a result, a cooperative effort in the follow-up of eye cases under treatment was initiated in which public health nursing visits were made to patients to insure an adequate adherence to treatment schedules. A statewide educational program for the public and the medical profession was instituted.

In Louisiana and Mississippi sampling surveys of the general population were made by an ophthalmologist to determine the extent of visual loss and eye defects. Results were used to formulate a public health practice in which county health department personnel registered and followed up patients with eye problems. The California program, begun in 1954, is emphasizing the cooperation of all interested voluntary and official agencies to determine the prevalence and degree of ocular illness in the population and to find ways in which these agencies can cooperate in a state-wide program to conserve vision.

#### National and International Grants

A grant of \$200,000 to endow a glaucoma research project was made to Johns Hopkins University Medical School in 1953. This followed three smaller payments of \$8,000 each for the same purpose. The research has been devoted to the development of improved instruments for measuring intraocular tension and to studies of the factors which influence changes of pressure within the eye.

A grant to the National Society for the Prevention of Blindness was made in 1950 to produce a motion picture film for the practicing physician on the early diagnosis and treatment of glaucoma. Spanish editions have been made available for distribution to Latin American countries.

Grants in Mexico and Brazil were made to provide Braille printing equipment and to train personnel to publish books in Braille. These funds were granted to official government agencies in the two countries and by them were channeled to



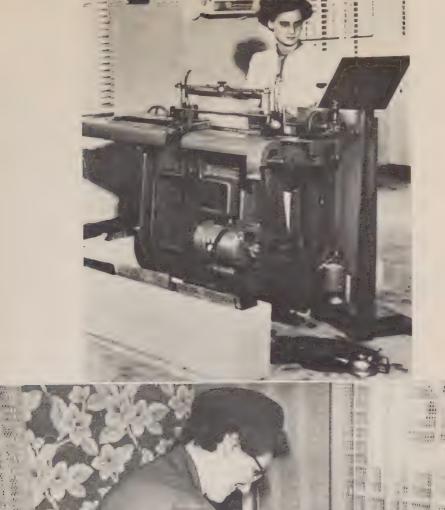


For many years the Foundation has had a special interest in the problems of the blind. To conserve vision and to aid the blind, several projects have been subsidized. These include (above) statewide educational programs for the public including Vision Survey meetings such as this one in Mississippi . . .

... sensory aids for the partially sighted and the blind, including the pictured curb detector and . . .

...programs relative to the cause and treatment of glaucoma (Here a nurse aids in a demonstration of medication) and . . .

... the development of Braille printing programs through which the blind can secure entertainment and additional education.





voluntary agencies which were interested in problems of the blind and which have facilities for the wide distribution of Braille publications.

Since 1948 the Foundation has assisted the Franklin Institute, Philadelphia, Pennsylvania, in the development of sensory aids for the partially sighted and the blind. A portable projection magnifier, perfected by the Institute and permitting direct visual reading by persons with impaired sight, is now being manufactured and distributed by a commercial firm. A trial guidance device to enable the blind person to detect differences in elevation has also been produced. This device is now being extensively tested preliminary to negotiations for its manufacture and distribution.

### The Past is But Prologue

In the foregoing chapters, brief sketches have chronicled some of the more than 1,500 projects and programs aided by the Foundation since its origin in 1930. As the organization pauses a moment to celebrate its Silver Anniversary and then concentrates on "What will be our best stewardship for the future?," there can be only a nod to retrospect, with emphasis upon the prospect that lies before us. That is the theme of the final chapter of this history.



## RETROSPECT AND PROSPECT

Chapter 6

The generation which has paralleled the Foundation's first quarter-century has recognized, perhaps more than any other, that living cannot be at a static level. During "the most dynamic period of the history of man," this generation has realized that life is marked by problems, crises, successes and failures, and that to meet the inevitable problems, people must assimilate evolving knowledge and master new skills.

The desire to assist people in their solving of problems has been the prime motivation of the Foundation in the more than 1,500 projects and programs since 1930. As our aid has spread from an early concentration upon the State of Michigan to regions, to the entire nation and to four continents, we have sought to remain constant to the belief of Mr. Kellogg that our concern should relate to the application of knowledge. As a consequence, we have made relatively few grants for basic research.

There has been no uniformity of results from the assistance we have tendered. Some of the aided programs seemed to have blazed new trails in the areas of health, education and welfare. Other assisted ventures have played moderate roles in helping children and adults to reach toward richer lives. A few programs have been relatively unsuccessful although most of these "failures" have not been exclusively so since they often have impelled a redirection of efforts toward a goal.

The past activities of the Foundation have helped to determine its present character, and, by the same token, the nature and quality of the current efforts are helping to shape the future. However, we would go along only in part with Pinero's statement that "The future is only the past again, entered through another gate." With due deference to the lessons learned from the past, we are determined not to be bound by it, and remaining true to our fundamental philosophy, we should hope to assist exploratory ventures in some heretofore unmeasured areas.

We do not question that a "Brave, New World" may come from the greatly accelerated emphasis upon the discoveries and possibilities of atomic energy, new industrial techniques, automation, electronics. However, we believe that there always will be with us the familiar human problems which have been a part of man's destiny since the dawn of history. To us it is equally as evident that there also will come new and intricate problems attendant to this new era of science, for if yesterday is a cancelled check, then tomorrow is a promissory note.

It takes no acute vision to realize that some of tomorrow's huge problems are already throwing a shadow upon the path just ahead of peoples everywhere. For instance, history tells us that many nations have passed away because of their improper treatment of the soil. Dust storms and floods are more than current and temporary calamities. Ages ago and in several parts of the world, great fertile areas were transformed into wastes and deserts through the cutting down of forests, the plowing up of grasslands, and other prodigal uses of basic resources. As the population of the world multiplies, there comes the crying need not only for conservation to preserve

the tillable soil now possessed, but also for measures to reclaim lost land and to secure heightened agricultural productivity everywhere that the multitudes may be fed.

Already exploratory patrols, universities and other agencies, are seeking solutions to the problem of feeding the greater population, and the Foundation has been privileged to lend financial assistance to a few of these efforts. From recent agricultural appropriations, grants have been made to establish the International Institute for Land Reclamation and Land Improvement (a study center and world clearing house located in The Netherlands); to aid Colombian agriculture through subsidies to two schools of agriculture in that South American nation; to give to farmers in selected experimental areas of the United States the benefit of intensified counsel from special Agricultural Extension agents; to establish a National Agricultural Extension Center for Advanced Study; to further the work of the National Project in Agricultural Communications that there may be reduced the present time lag between research findings and their general application by farmers; and to establish a new Institute of Agricultural Medicine which will deal with preventive measures to safeguard the farmer's health from occupational hazards.

In the important area of healthful living, mankind also has aspirations for universally optimum conditions. Striving to continue alert to the efforts of pioneers, the Foundation is giving assistance to professional leaders who, with vision and imagination, are scouting ways to improve health services to the people. Now in its fourth year is a Foundation-aided program in eight medical schools of the United States to develop new methods and to expand the content of programs for the teaching of preventive medicine. The program's reception is one of several evidences that the physician is turning to a broader concept of his mission, involving efforts to reduce extensions, complications and deaths from disease and, where possible, to prevent the onset of disease.

Another promising development in the health field prompted the Foundation recently to extend financial assistance to experiments by the American College of Surgeons and other professional organizations to develop methods of evaluating medical care in hospitals as a means of providing additional opportunities in the field of medical education. The Foundation has also been glad to aid the efforts of the nursing profession to improve the quality and quantity of nursing service administrators and thus measurably to improve the nursing care of patients in all types of hospitals. Fourteen universities have received funds to develop and improve the preservice and in-service preparation of nursing directors, assistant directors, supervisors and head nurses in the health institutions of their particular regions.

An early effort of the Foundation was to help to develop adequate public health services in local communities. However, the contributions of epidemiologists, immunologists and practicing physicians have all but stamped out many of the communicable diseases. Thus the challenges and opportunities for public health, especially in the United States, are markedly different from those of the 1930s.

Many public health leaders believe that the entire concept and structure of the public health movement needs re-examination. In cooperation with the profession's desire to chart a new course for the future, the Foundation during recent years has financed a limited number of experimental programs—Home Accident Prevention; the aforementioned Teaching of Preventive Medicine; Gerontology; Sight Conservation; undergraduate training of non-medical health administrators; experiments in the field of nutrition—in an effort to ascertain more effective ways of meeting community health and welfare needs of today and of tomorrow.

Accompanying the long strides in the natural sciences, will we similarly gain greater specialized knowledge of the social sciences and creative efforts toward curing or at least palliating many social ills?

One means for such palliation is the improvement of education at all levels. The centers for continuing education at Michigan State University, the University of Georgia, Wabash College, and for the Irish Countrywomen's Association near Dublin, are being aided by the Foundation in a belief that it is natural for people to want to develop their innate talents and that it is essential for a democracy to develop and maintain a socially and economically literate people. Through the short courses and other training sessions, citizens are assisted toward their goals of making land more productive, of raising economic, educational and health levels, of improving housing facilities and of greater political and civic participation.

There are many portents that the peoples of the world may be on the eve of richer, fuller lives than we have ever dreamed. Nevertheless, we do not believe that the more abundant life is simply ours for the asking. If our children are to have this greater future, leaders and followers alike must exert intelligent, continuous and arduous efforts. Inspiration and perspiration must be in evidence if we are to leap the many and high barriers ahead. Will we be able to conquer such obstacles as the imbalance between dynamic technology and the laggard human relations? Someone has said: "Man has one foot in an airplane (the area of technology) and the other in an oxeart (the area of social relationships, of human communications and conscience)."

As the people go toward the fair adventure of tomorrow, the Foundation intensely desires to make constructive contribution toward the attainment of new frontiers both in the area of material gains and in the world of ideals and ideas. To the extent that we make such contributions, thus do we justify the trust placed in us by Mr. Kellogg. Our chief observance of the Foundation's twenty-fifth anniversary has been through an effort to determine "Where should the Foundation go from here? In our next quarter-century, along what paths lie our greatest opportunities for public service?"

These are questions which cannot be resolved overnight but which must be answered. We need the concentrated thinking of our trustees and our staff. We also plan to use the best consultation available. A committee of Foundation personnel is currently planning to bring together authorities from the agricultural, educational and health fields, from the areas of the natural and social sciences, to help us interpret the needs of the future and, therefore, to guide the direction of policies and activities in the years ahead. Perhaps their advice and our conclusions will lead to changes in plan and approach.

Likely the intricate problems, the "high barriers" mentioned, will require occasional re-evaluation and redirection of our resources and personnel. In planning a continuance and a heightening of our endeavor to help others to help themselves, we will always try to recognize that there are many other agencies and individuals interested in implementing the same human strivings as are we and, therefore, the Foundation will seek to coordinate its efforts with those of other organizations, private and governmental.

Retrospect and prospect. As we turn from observation of our past and attempt to look into tomorrow, what are some of the broad problem areas which have implications for the future?

Perhaps nothing has currently seized the minds of people more than the desire to shape a world peace and international good will. With two devastating world wars in this century, intermittent "police actions," the potential of modern weapons, it is too obvious that only the reduction of international tensions and the increase of cooperation between nations can save the world from almost total destruction of civilization as we have known it. Small though the contribution of each may be, every individual and every organization owes to mankind an obligation to work for an honorable and lasting peace.

To date, no one has been able to set up a successful formula for the attainment of this goal, but paving stones in the highway to peace can be laid through assistance to communities of nations in their attainment of better living standards, and in the interpretation of their cultures to others in the interest of mutual understanding. An important purpose of every international project supported by the Foundation—whether in the United Kingdom, Australia, Latin America or Canada—has been the furtherance of international friendship. An invaluable dividend from the Foundation's fellowship program has been the fact that the proteges prove unofficial ambassadors of good will from one country to another.

If the wishes of the people the world over for peace can become a reality, then most of the world's energies and resources can be constructively used toward the routing of other human problems. Among these is a problem area which has already had some consideration by the Foundation and which, from the standpoints of human worth and drama, looms significantly in the current and future pictures. We refer to the fact that we are becoming a nation of older people.

Since 1900 the population of the United States has doubled, but the number of persons 45 to 64 years of age has tripled, while the number 65 and over has quadrupled. The economic and social aspects of this transformation are obvious. The need to assist in securing richer lives for the aged, to bulwark their ambition to be economically and socially useful, is equally plain. Two recent commitments of the Foundation, one to the Colorado State Department of Health and the other to the Harvard School of Public Health, have been efforts to assist in different approaches to determine the role of health agencies in the field of gerontology. As our aging population increases, we anticipate that our efforts will be greatly increased in behalf of the elderly.

At the other end of the age scale are our school children. They, too, have been caught in the vortex of a rapidly rising population. In most towns or cities, one can readily realize the inability of school construction programs to keep up with the growth of the student-bodies. The unprecedented expansion of our educational system . . . crowded schools and classrooms . . . the need for richer curricula and for attention to

the gifted child...the sociological and cultural lag as compared to the technological revolution ... the needed accentuation of the social sciences because of their effects upon human relationships...how great are the obligations and burdens of our public schools!

More of the Foundation's funds have gone to programs to better the education of children than to any other category of human endeavor. It is probable that this will be a continuing fact, based upon the apparent needs and also because our founder believed that "Education offers the greatest opportunity for really improving one generation over another." In connection with the current school crisis, the Foundation since 1950 has appropriated approximately 5\( \frac{1}{4} \) million dollars in behalf of a nationwide Cooperative Program in Educational Administration. From the forty-eight states have come encouraging evidences that the "CPEA" activities have valuably supplemented the preservice and in-service preparation of capable leaders to face intricate educational problems. And with relation to the aforementioned need for emphasis upon the social sciences, perhaps the assisted Foundation for Research in Human Behavior can throw important light upon the phenomena of human behavior even if it cannot tell the full story.

Mention has already been made of what has facetiously been termed the "Battle of the Bulge." This refers to the effect of an increasing world population on all aspects of human endeavor. The problems of feeding, housing, educating and improving the health of this growing population deserve the attention of all of us. The Foundation, already subsidizing several programs which look to the future, will be receptive to other ideas of potential worth in coping with a current, vital problem.

Another problem which grows greater with the hectic pace and heightened tension of our times is that of the need for more and better services in the field of mental health. It has been estimated that at least one out of every ten persons born today will spend some portion of his lifetime in a mental hospital. Considerably more will need some type of psychiatric treatment other than hospitalization. Many existent mental hospitals offer only custodial care. The supply of psychiatrists and psychiatric nurses is far below the demand for their services. Mental health is a relatively untouched field of high importance and invites pioneering activity.

In spite of problems so evident, the vista ahead is one of promise. Fulfillment of that promise rests upon the shoulders of every one of us. As the Foundation begins its second quarter-century of activity, it looks upon the future both as a period of obligation and as a period of fruition.

Our resources, of course, are limited and the needs of communities and individuals are limitless. These facts will necessitate the channeling of our assistance to those programs which seem of greatest potential worth. But there are advantages which reside in a private philanthropic foundation—it flexibility, its ability to make commitments over a considerable period of time, its comparative freedom from political complications, a willingness to risk failure, with no particular premium upon immediate results. May these assets offset our limitations and may our stewardship prove wise and alert in the challenging years ahead!

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Annual Report of the Officers

for 1954-1955



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# REPORT OF THE GENERAL DIRECTOR

In each of its twenty-five years of existence, the Foundation has prepared an annual report, although distribution of these reports to the public did not start until the end of the 1951-52 fiscal year. Without exception, the reports have been devoted to a detailing of the salient programs of the fiscal year. The pattern for this, our Silver Anniversary year, is necessarily different, however, since many of the happenings of the fiscal year ended August 31 last are chronicled within the preceding pages of this history of our quarter-century of activities.

It is also believed that to add the usual detail of the annual report to the pages of the history would make the book unduly long. Instead, it is the purpose of this Report of the General Director, of the subsequent Reports of the Secretary and the Treasurer (including the expanded financial exhibits) to sketch the operations of the 1954-55 year. Particular attention is called to the exhibit titled "Appropriations and Payments" which briefs our activities of the last fiscal year in terms of purpose, scope and finances.

Again in 1954-55, the expenditures of the Foundation, \$4,781,624, exceeded the income, \$4,186,116. This has been the case during nine of the last fourteen years.

The year also was one in which the trustees approved the initiation of assistance to a number of new and important programs and came to decisions to continue support to two major areas of endeavor. Many of the new programs were mentioned in the preceding "Retrospect and Prospect" chapter. Another noteworthy recipient of new aid was the program to establish Master's degree courses in specialized areas of nursing in selected Southern universities. One of the areas in

which support will be continued involves an extension of the program of leadership as carried forward by the nation-wide Cooperative Program in Educational Administration during the last five years. Such extension will enable approximately thirty key institutions to put into greater practice the findings of the CPEA.

Another continuation of Foundation support has resulted from an affirmation of the trustees' belief in the evolving Education in Hospital Administration. The additional commitments will enable six universities to demonstrate the further evolution of university programs for the advancement of the education of the hospital administrator.

The Foundation receives counsel from national advisory committees in the fields of agriculture, dentistry, education, hospitals, medicine and public health and nursing. It is a policy to rotate membership on these committees so that, over a period of years, the wealth of experience from various outstanding professional people throughout the nation may be available to our officers and staff.

In keeping with this policy, Jack Masur, Chief, Bureau of Medical Services, U. S. Public Health Service, and George E. Cartmill, Director of Harper Hospital, Detroit, were each appointed to one-year terms on the Hospital Advisory Committee, succeeding James A. Hamilton, Dir., Course in Hospital Adminis., University of Minnesota, and Harvey Agnew, Dir., Department of Hospital Adminis. at the University of Toronto. On the Medical Committee Herman E. Hilleboe, Commissioner of Health, State of New York, was appointed to a one-year term, succeeding L. E. Burney, Indiana State Health Commissioner. On the Nursing Committee Marjorie Bartholf, Dean of the School of Nursing, University of Texas, was appointed for one year and Marion W. Sheahan, Dir., Division of Nursing Services, National League for Nursing, for three years, to succeed Marie Farrell, Acting Dean, School of Nursing, Boston University, and Myrtle Kitchell, Dean of the College of Nursing, State University of Iowa.

A complete list of the membership of these committees is on Page 236 of this report. On Page 238 are listed the names of all former advisory committee members. The Foundation is deeply indebted to the advisory committees for the counsel they provide.

During the latter portion of the fiscal year, and particularly following the Foundation's twenty-fifth birthday on June 21, the attention of the trustees and the staff was centered upon ways of appropriately observing this milestone of Foundation endeavor. From a review of our activities of the past, we came to a conclusion that the most worth-while observance would be a look at our future. It was agreed that particularly valuable would be the counsel of world and national leaders as conveyed to our advisory committees, the trustees and the staff during the forthcoming year. These leaders, yet to be selected, will take a look at certain broad problems to identify areas for the future that appear to lend themselves best to the type of pioneering leadership with which the Foundation should be concerned.

In advance of such counsel, we would hazard the belief that a majority of the problems in the areas of Foundation interest will be those which come as a result of the increased world population and the demands of that population upon educational, agricultural and health services.

The fiscal year saw the retirement of one long-time member of the staff, the addition of one person to the staff and a leaveof-absence for a staff member.

In August, Mrs. Bessie Rogers Young retired from the staff after twenty-five years with the organization. The only person who has been with the Foundation since its inception in 1930, her tenure of a quarter-century has been extremely valuable to her associates and to the success of many of our activities. Quiet, efficient and personable, her excellent judgment and cheerful personality have embellished the loyal and unstinting service she has rendered to the trustees, the officers, and the staff. We are happy to report that Mrs.

Young will continue as an honorary member of the Board of Trustees and will also be available in a consultative capacity to the Foundation.

Recently Ned C. Fahs joined the staff in the capacity of Associate Director of the Latin American Division. Dr. Fahs, who has had a distinguished career in several governmental posts, including the most recent as Cultural Attache at the American Embassy in Bogota, Colombia, will assume the directorship of the Division upon the retirement of Dr. Benjamin G. Horning next year. It was Dr. Horning who so capably and brilliantly pioneered the Foundation's assistance to educational and health activities in Latin America. Eminent in his field, he has been a valued member of the staff since 1942.

During the year, Dr. Robert G. VanDuyn, Associate Director of the Division of Education, was given a year's leave-of-absence for a tour of duty in the Philippine Islands and other countries of the East. There he is a member of the Stanford University team connected with the International Cooperation Administration (formerly FOA) in the strengthening of educational operations of the area.



# REPORT OF THE SECRETARY

Twelve meetings of the Board of Trustees and two meetings of the Members of the Corporation were held at the offices of the W. K. Kellogg Foundation in Battle Creek during the year. At the annual meeting of the Members on December 21, 1954, Bessie Rogers Young, Glenn A. Cross and Henry F. Vaughan were re-elected Members and Trustees of the Foundation for terms of three years. Andrew Pattullo and John O. Snook were elected Honorary Trustees for one year. At the annual meeting of the Trustees Orville L. DeBolt was elected Treasurer and Leonard L. White elected Secretary of the Foundation. The complete roster of Trustees, as well as the Officers of the Foundation, will be found in the section of this report headed "Personnel of the Foundation."

The annual audit of the W. K. Kellogg Foundation books made by Price Waterhouse & Co. for the year ending August 31, 1954, was approved by the Board of Trustees on January 18, 1955. During the year the Board of Trustees made new appropriations totaling \$6,736,600 for the activities of the Foundation during the current and ensuing fiscal years, and on August 16, 1955, approved payments to be made during the 1955-56 fiscal year in the amount of \$4,935,067.

Of the many requests for funds, loans and professional services considered by the Foundation during the year, 729 were declined. Many of these applications were in behalf of projects outside the scope of the Foundation's present interests. However, a great number of relevant requests were declined because of limited resources and prior commitments. The applications that were declined may be classified as follows:

Scholarships, fellowships, travel grants and grants for individual training, 292; financial aid to health, educational and service agencies to develop or finance programs, 207; funds for constructing and/or equipping facilities, 96; studies or research, 78; publications and films, 26; conferences and meetings, 21; personal financial assistance, 9.

During the year there were 499 visitors to the Foundation, including people from 29 states and 24 countries.



# REPORT OF THE TREASURER

Presented on the following pages are financial reports reflecting the total assets available to the W. K. Kellogg Foundation at August 31, 1955, at \$71,361,887 book amount and \$124,257,200 market value. Income of \$4,186,116 during the year represented a return of 5.87 and 3.37 per cent respectively on these values.

The above figures are of interest when related to the approximate \$47,000,000 value of the gifts from Mr. W. K. Kellogg at the time of his various donations to the Foundation and when related to the fact that during its quarter-century of existence the Foundation has expended in excess of \$51,000,000. Judicious investment counsel and the expanding economy account for a marked appreciation in our investments. As a result of this gradual increase in our assets the Foundation's income has permitted it to maintain a constantly broadening scope of activities. The \$4,781,624 expenditures during 1954-55 were the largest in our history.

The accompanying exhibits are an effort to relay financial data of interest from both the current and the historical standpoint. For example, the Balance Sheet on Page 203, the Statement of Income and Expenditures on Page 204, the table reflecting Appropriations and Payments starting on Page 210 and the Schedule of Securities starting on Page 228, reflect a synopsis of our fiscal operations during the past year. The historical aspects of our fiscal operations during the quarter-century are reflected in the Distribution of United States Program Payments on Page 207, the Distribution of International Program Payments on Page 206 and the table on Pages 208-9 reflecting the Foundation's program payments by years and fields of interests.

## PRICE WATERHOUSE & CO.

PENOBSCOT BUILDING

DETROIT 26

October 15, 1955

To the Board of Trustees W. K. Kellogg Foundation

In our opinion the financial statements in the accompanying Report of the Treasurer present fairly the combined financial position of W. K. Kellogg Foundation and W. K. Kellogg Foundation Trust at August 31, dation and the Foundation's income and expenditures for and the Foundation's income and expenditures for programs and administration during the year then ended, in accordance with generally accepted principles of in accordance with generally accepted principles in accordance with generally accepted principles in the stitutional accounting applied on a basis consistent with that of the preceding year.

The accounts are maintained on a cash basis except that appropriations for future expenditures and amortization are reflected in the balance sheet and satement of securities. Assets of W. K. Kellogg statement of securities. Trust and Savings Bank, Foundation Trust are included on the basis of statements furnished us by Harris Trust and Savings Bank, the corporate trustee. Our examination of the the corporate trustee. Our examination with generational statements was made in accordance with generating accepted auditing standards and accordingly infinancial statements was made in records and such ally accepted auditing standards and according to cluded such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

Price Waterhouse & &

## BALANCE SHEET — AUGUST 31, 1955

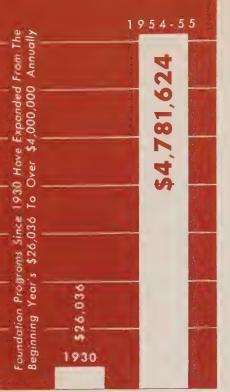
ASSETS	BOOK AMOUNT	MARKET VALUE
GENERAL FUND Cash Stocks Bonds Leased real estate Insurance proceeds deposited with	\$ 269,055 14,418,640 20,597,039 1,980,082	\$ 269,055 22,322,282 20,318,591 1,980,082
insurance companies Notes and accounts receivable Real estate and equipment	88,061 591,493 241,780	88,061 591,493 241,780
Trusts Administered by the Foundation Cash and securities	\$38,186,150 70,320	\$ 45,811,344 157,692
THE W. K. KELLOGG FOUNDATION TRUST 2,261,030 shares Kellogg Co. common stock	33,105,417 \$71,361,887	78,288,164 \$124,257,200
FUND BALANCES		
GENERAL FUND Appropriated for 1955-56 Appropriated for subsequent years Unappropriated	\$ 4,935,067 6,130,736 27,120,347 \$38,186,150	\$ 4,935,067 6,130,736 34,745,541 \$ 45,811,344
TRUSTS ADMINISTERED BY THE FOUNDATION	70,320	157,692
THE W. K. KELLOGG FOUNDATION TRUST	33,105,417	78,288,164
	\$71,361,887	\$124,257,200

This Balance Sheet includes the W. K. Kellogg Foundation Trust of which the Foundation is beneficiary. It also includes certain trusts, the principal of which will eventually accrue to the Foundation and which are currently administered on behalf of interim beneficiaries.

Foundation and which are currently administered on behalf of interim beneficiaries.

Assets purchased by the Foundation are stated in the Book Amount column at cost less amortization, and assets received as gifts or distributions from trusts are stated at the estimated values at dates of acquisition.

In the Market Value column, securities are included at approximate quoted market value at August 31, 1955. Other assets are at book amounts.



## INCOME AND EXPENDITURES — 1954-55

#### *INCOME*

From trusts	\$2,805,207
From investments	1,347,903
Other	33,006
	\$4,186,116

#### **EXPENDITURES**

Program payments		\$4,399,539
Refunds on payments made in prior years		(12,976)
Administration		
Consultant and advisory service	\$ 16,654	
Legal and auditing	15,550	
Office operations	31,721	
Publications	10,945	
Rent	6,000	
Salaries and employees' security program	280,585	
Travel	32,396	
Trustee honoraria	1,210	395,061
		\$4,781,624
Excess of expenditures over income		\$ 595,508

# DISTRIBUTION OF PROGRAM PAYMENTS, 1954-55

SUBJECT MATTER BY GEOGRAPHICAL A	REAS	GEOGRAPHICAL BY SUBJECT MAT	
AGRICULTURE		CANADA	
Europe	\$ 234,196	Dentistry	\$ 11,923
Latin America	42,474	Education	67,096
United States	316,022	Hospitals	39,987
	\$ 592,692	Medicine	12,378
DENTICTRY		Nursing	54,489
DENTISTRY Canada	\$ 11.923		\$ 185,873
Europe	\$ 11,923 3,062		,
Latin America	27,909		
United States	33,641		
omed states	\$ 76,535	EUROPE	
	φ 10,000	Agriculture	\$ 234,196
EDUCATION		Dentistry	3,062
Canada	\$ 67,096	Education	4,700
Europe	4,700	Medicine	2,987
United States	2,109,669		\$ 244,945
	\$2,181,465		
HOSPITALS			
Canada	\$ 39,987	I ATINI AMERICA	
Latin America	13,871	LATIN AMERICA	
United States	281,225	Agriculture	\$ 42,474
	\$ 335,083	Dentistry Hospitals	27,909 13,871
. APPLOTUR	,,	Medicine	177,128
MEDICINE	A 10.070	Nursing	29,729
Canada	\$ 12,378 2,987	Public Health	18,666
Europe Latin America	177,128		\$ 309,777
United States	250,985		Ψ 000,111
Office States	\$ 443,478		
	φ 440,470		
NURSING		UNITED STATES	
Canada	\$ 54,489	Agriculture	\$ 316,022
Latin America	29,729	Dentistry	33,641
United States	288,172	Education	2,109,669
	\$ 372,390	Hospitals	281,225
PUBLIC HEALTH		Medicine	250,985
Latin America	\$ 18,666	Nursing	288,172
United States	359,237	Public Health	359,237 19,993
	\$ 377,903	General	· ·
CENTED AT	,,,		\$3,658,944
GENERAL	d 10.000		
United States	\$ 19,993		
TOTAL	\$4,399,539	TOTAL	\$4,399,539

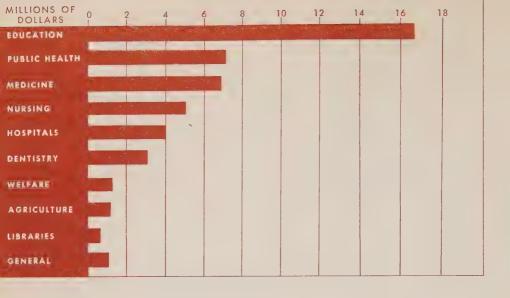
# DISTRIBUTION OF INTERNATIONAL PROGRAM PAYMENTS

COUNTRY	1954-55	1930 TO DATE
Argentina	\$	\$ 43,964
Belgium	24	998
Bolivia	3,574	30,647
Brazil	67,680	514,979
Canada	185,873	1,436,439
Chile	47,566	357,851
China		20,849
Colombia	73,837	266,583
Costa Rica	6,119	62,052
Cuba		15,464
Dominican Republic		6,486
Ecuador	820	56,845
El Salvador	11,189	73,670
England and Wales	97,173	299,397
Germany	442	1,294
Guatemala	11,935	78,935
Haiti	50	17,193
Honduras	1,306	18,746
Ireland	58,486	172,841
Luxemburg	26	2,521
Mexico	32,736	447,679
Netherlands	39,496	41,901
Nicaragua	3,457	18,330
Norway	51	4,487
Panama	3,085	13,840
Paraguay	11,009	87,855
Peru	19,613	184,470
Philippines		47,557
Puerto Rico	467	2,678
Romania Scotland	40.047	1,000
Sweden	49,247	141,321
Trinidad		2,141 2,842
Turkey		387
Uruguay		41,268
Venezuela		30,150
Not Distributed by Country	15,334	234,032
TOTAL	\$740,595	\$4,779,692



# DISTRIBUTION OF U. S. PAYMENTS THROUGH 1954-55

			1000					
STATE	1954-55	1	1930 FO DATE	STATE		1954-55		1930 DATE
Alabama	\$ 5,983	\$	218,653	New Hampshire			\$	6,330
Arizona			4,000	New Jersey				1,676
Arkansas	9,539		117,518	New Mexico				33,993
California	124,703		1,756,922	New York	\$	290.045	2,	582,098
Colorado	29,135		490,316	North Carolina		39,662		361,716
Connecticut			127,907	North Dakota				5,000
Dist. of Columbia			118,210	Ohio		88,922		831,535
Florida	11,604		98,499	Oklahoma		21,135		247,806
Georgia	676,420		1,536,369	Oregon		70,062		666,572
Idaho			23,258	Pennsylvania		10,000		587,672
Illinois	138,900		1,277,395	South Carolina				16,378
Indiana	31,772		93,928	South Dakota				14,842
Iowa	84,280		209,554	Tennessee		93,074	1,	286.114
Kansas	18,618		71,719	Texas		93,268		756,769
Kentucky	62,642		236,389	Utah		41,988	2	237,828
Louisiana	1,857		284,892	Vermont				32,787
Maine			6,587	Virginia		4,910		152,543
Maryland	51,012		201,613	Washington		66,318	2	271,777
Massachusetts	208,294		1,317,559	West Virginia		8,500		34,237
Michigan	889,986	19	9,968,048	Wisconsin		145,000	5	248,479
Minnesota	50,992		839,215	Wyoming				4,000
Mississippi	423		210,408	Not Distributable		284,697	4,5	203,626
Missouri	5,203		375,858		_			
Montana			34,872	TOTAL	\$3	3,658,944	\$42,3	342,583
Nebraska			139,121					



****	AGRI-	****	GENERAL	*********	
YEAR	CULTURE	DENTISTRY	EDUCATION	HOSPITALS	LIBRARIES
1930-31		\$ 210	\$ 11,710	\$ 300	\$ 766
1931-32	ည် သ	3,108	341,036	200	965
1932-33	52-	8,945	371,061	2,643	1,523
1933-34	193	13,577	43,124	810	1,530
1934-35		26,087	57,229	546	1,926
1935-36	'n	31,407	215,704	10,007	4,244
1936-37	pa	65,148	227,533	16,974	20,511
1937-38	sh	83,635	278,710	54,182	13,369
1938-39	bli	329,525	571,661	380,586	5,857
1939-40	established	99,075	333,142	141,964	11,546
1940-41	õ	91,126	538,807	236,038	122,264
1941-42	re	640,472	933,375	159,840	314,391
1942-43	<u>F</u>	286,192	139,131	199,792	3,460
1943-44	cn	64,141	476,893	141,255	5,907
1944-45	griculture	49,153,	418,881	127,142	41,492
1945-46	¥	155,258	402,183	163,753	39,280
1946-47	Jo	151,298	436,913	147,772	30,271
1947-48	g	119,550	572,934	139,176	22,942
1948-49	Division	103,262	865,340	280,563	13,149
1949-50	Ž	117,222	2,352,970	158,351	5,191
1950-51	Ä	154,026	1,155,639	271,126	45
1951-52		174,683	1,155,616	520,292	10
1952-53	\$235,953	95,243	951,972	319,909	
1953-54	426,109	116,833	1,745,786	232,065	
1954-55	592,692	76,535	2,181,465	335,083	
	\$1,254,754	\$3,055,711	\$16,778,815	\$4,040,369	\$660,629



# FOUNDATION EXPENDITURES

SINCE 1930

	MEDICINE	R.	NURSING		PUBLIC HEALTH		WELFARE		GENERAL		TOTAL
\$	7,592	\$	926	\$	2,380	\$	825	\$	1,327	\$	26,036
Ψ	16,939	Ψ	3,472	Ψ	21,126	Ψ	17,809	Ψ	3,491	Ψ	408,146
	32,387		3,497		49,018		48,750		38,212		556,036
	36,352		3,942		84,534		49,098		74,358		307,325
	45,629		2,285		132,783		50,662		36,039		353,186
	59,024		2,274		174.953		68,475		75,632		641,720
	97,658		3,660		250,450		102,150		72,625		856,709
	106,504		3,582		264,325		121,214		64,407		989,928
	75,270		1,970		328,929		112,352		64,346		1,870,496
	79.979		8,751		294,111		123,906		118,770		1,211,244
	163,085		21.331		781,137		102,716		107,358		2,163,862
	994,546		358,765		410,890		88,816		147,926		4,049,021
	428,381		103,013		339,770		54,020		70,039		1,623,798
	141,428		103,590		314.811		53,120		36,225		1.337,370
	376,465		136.013		397,111		69,020		37,611		1,652,888
	416.180		317.528		210,175		69,020		28,665		1,802,042
	407,754		304,683		343,612		18,420		18,976		1,859,699
	342,338		331,065		281,110		3,420		3,286		1,815,821
	314,118		266,179		269,413		12,620		2,618		2,127,262
	342,625		266,357		363,901		3,200		20,000		3,629,817
	295,999		623,509		275,432		7,668		,		2,783,444
	371.848		644,329		339,545		24,049				3,230,362
	733.944		661,136		544,456		_ ,		72,191		3,614,804
	535.881		471,641		261,726				21,684		3,811,725
	443,478		372,390		377,903				19,993		4,399,539
\$6	,865,404	\$5	,015,888	\$7	,113,601	\$1	,201,330	\$1	,135,779	\$4	7,122,280

#### APPROPRIATIONS AND PAYMENTS

The Appropriations column includes appropriations during the fiscal year plus unexpended balance of prior year appropriations.

AUS  HOSPITALS  AUSTRALIAN HOSPITAL ASSOCIATION  To establish a formal educational program for the preparation of hospital administrators in Australia		ALIA 125,000	\$ Payments 1954-55	App	Inpaid ropriations st 31, 1955
CA	NA:	DA•			
DENTISTRY					
CANADIAN DENTAL ASSOCIATION  To assist the Council on Dental Education to develop a program of accreditation and consultation services for the Canadian dental schools	\$	6,925	\$ 770	\$	6,155
Fellowships Dalhousie University McGill University University of Montreal To strengthen Canadian dental schools through faculty training for the further development of their programs of undergraduate and postgraduate education		1,027 7,944 2,182	1,027 7,944 2,182		
EDUCATION					
Canadian Association for Adult Education  To provide intensive training experiences for selected Canadian teachers for effective use of rural high schools in adult education and community improvement		3,348	3,348		

<sup>&</sup>lt;sup>o</sup>Unpaid Appropriations are in U. S. dollars on basis of exchange rates at dates of various payments.

	Appropriations	Payments 1954-55	Unpaid Appropriations August 31, 1955
Canadian Education Association \$  To develop in-service and preservice programs for the improvement of school administration, particularly in the superintendencies of the newly reorganized larger school districts	108,643	\$ 63,748	\$ 44,895
HOSPITALS			
Associated Hospitals of Manitoba  To improve the administration of small hospitals through a cooperative and centralized service of accounting and financial consultation	24,872	13,327	11,545
Canadian Hospital Association  To improve the services of Canadian hospitals through the development of educational programs for administrators and for the medical records librarians	31,341	14,310	17,031
University of Toronto  To improve the quality of education in hospital administration by incorporating the use of case material techniques	24,803	12,350	12,453
MEDICINE			
GRADUATE AND POSTGRADUATE EDUCATION		E 00E	10 700
Dalhousie University University of Toronto	18,467 9,720	7,687 4,691	10,780 5,029
To improve medical services through the strengthening of university educational programs for practitioners			
NURSING			
McMaster University A program for improving the quality of the teaching of the basic sciences in Canadian hospital schools of Nursing.	25,660	9,515	16,145

	$\mathbf{A}_{1}$	ppropriations	Payments 1954-55	Appro	paid priations 31, 1955
University of Montreal  To provide an orientation experience in nursing service administration to the director of the new university hospital	\$	1,094	\$ 1,094	\$	
University of Saskatchewan  To improve nursing services in the hospitals of Saskatchewan by developing a centralized program in basic nursing education for the Province's eight hospital schools of nursing		61,991	43,880		18,111
EU	RO	PE*			
AGRICULTURE					
AGRICULTURAL RESEARCH COUNCIL	\$	1,687	\$ 1,687	\$	
To purchase in the U. S. research equipment and materials which are difficult to obtain in England because of exchange limitations					
FELLOWSHIPS					
Agricultural Research Council Dept. of Agriculture of Scotland Edinburgh and the East of Scotland		9,373 4,825	9,373 4,825		
College of Agriculture		7,763	7,763		
Ministry of Agriculture, Fisheries and Food — England and Wales Minis. of Agriculture for N. Ireland N. of Scotland Col. of Agriculture State Agric. Univ. of Netherlands University of Glasgow West of Scotland Agricultural Col.		20,433 2,763 11,366 200 1,773 11,246	20,433 2,763 11,366 200 1,773 11,246		
To cooperate with United Kingdom efforts to increase agricultural productivity by providing educational experiences for selected agricultural faculty, research and advisory service percental					

<sup>\*</sup>Unpaid Appropriations are in U. S. dollars on basis of exchange rates at dates of various payments.

ice personnel

	Appropriations	Payments 1954-55	Unpaid Appropriations August 31, 1955
INTERNATIONAL INSTITUTE FOR LAND RECLAMATION & LAND IMPROVEMENT  To establish an international clearing house and center for the study of agricultural, social and economic problems pertaining to the reclamation of land	\$ 330,375	\$ 39,270	\$ 291,105
IRISH COUNTRYWOMEN'S ASSOCIATION  To improve rural life through establishment of a residential center and development of a program of continuing education for the country women of Ireland	96,363	51,592	44,771
Nuffield Farm Scholars  To cooperate with the Nuffield Foundation of England in extending to the United States that organization's traveling scholarships designed to afford young farmers opportunities for study abroad	9,946	9,946	
ROWETT RESEARCH INSTITUTE  To cooperate with United Kingdom efforts to increase agricultural productivity by assisting the Institute's animal nutrition research	5,527	3,761	1,766
Young Farmers' Clubs  Isle of Man Federation Nat. Federation of England & Wales Scottish Association  To help to prepare United Kingdom future farmers and farm leaders by strengthening and expanding the programs of Young Farmers' Clubs	4,757 176,991 33,982	1,019 45,924 11,255	3,738 131,067 22,727
DENTISTRY  UNIVERSITY OF LONDON  Fellowship for specialized study in the United States for a faculty member	3,062	3,062	

	Appropriations	Payments 1954-55	Unpaid Appropriations August 31, 1955
EDUCATION			
IRISH COUNTRYWOMEN'S ASSOCIATION Fellowships for study of continuing education techniques in the United States for the President and Resident Director	\$ 4,108	\$ 4,108	\$
PRIOR FELLOWSHIP PAYMENTS  Concluding payments on prior fellowships to enable educational editors of Belgium, Germany, Luxemburg, The Netherlands, Norway and Ulster to attend an international editors' workshop in the U.S.	592	592	
MEDICINE			
Oxford University	1,200	1,200	
University of London Fellowships for specialized study in the U. S. for faculty members	1,787	1,787	
LATIN AGRICULTURE	AMERICA		
NATIONAL UNIVERSITY OF COLOMBIA  To cooperate with the Colombian Ministries of Agriculture and Education, the National University of Colombia, International Cooperation Administration, and Michigan State University, in the expansion and strengthening of the faculties of agronomy at Palmira and Medellin for the achievement of more effective and productive agriculture in Colombia	\$ 299,143	\$ 42,474	\$ 256,669
DENTISTRY			
Fellowships World Health Organization University of Chile Nat. University of Colombia Univ. of Antioquia, Colombia University of Costa Rica	2,997 6,340 644 2,990 5,360	2,997 6,340 644 2,990 5,360	

	Appropriations	Payments 1954-55	Unpaid Appropriations August 31, 1955
Univ. of San Carlos, Guatemala University of Puebla, Mexico  For the improvement of health services by providing educational experiences (usually in the United States) for young faculty members in the professional schools	\$ 678 669	\$ 678 669	\$
Pan American Sanitary Bureau  To provide a consultant in dentistry for the public health and professional education agencies and universities in Latin American countries served by the Bureau	38,151	8,231	29,920
HOSPITALS			
EDUCATION IN HOSPITAL ADMINISTRATION Univ. of São Paulo, Brazil University of Chile  To improve hospital services by developing the first two schools of hospital administration in Latin America	4,754 4,843	4,754 2,443	2,400
FELLOWSHIPS			
University of Paraná, Brazil Univ. of São Paulo, Brazil Univ. of Antioquia, Colombia For the improvement of health services by providing educational experiences (usually in the United States) for young faculty members in the professional schools	1,605 3,362 1,707	1,605 3,362 1,707	
MEDICINE			
EQUIPMENT AND TEACHING AIDS  Inst. of Neoplastic Illnesses, Peru Univ. of São Paulo, Brazil University of Chile Univ. of Concepción, Chile Univ. of Nuevo León, Mexico Nat. University of Paraguay	621 384 6,674 2,736 2,931	621 384 6,674 2,736 2,931	

	Appropriations	Payments 1954-55	Unpaid Appropriations August 31, 1955
Univ. of San Marcos, Peru	\$ 6,487 \$	6,487	\$
To provide equipment and teaching aids to augment the teaching and research programs of professional agencies and universities employing former Foundation Fellows			
FELLOWSHIPS			
Univ. of San Andrés, Bolivia Paulist Sch. of Medicine, Brazil University of Alagôas, Brazil University of Bahia, Brazil University of Brazil University of Recife, Brazil University of Recife, Brazil Univ. of São Paulo, Brazil University of Chile Univ. of Concepción, Chile Nat. University of Colombia Univ. of Antioquia, Colombia Univ. of Cartagena, Colombia Univ. of Ecuador Univ. of Esalvador University of El Salvador Univ. of San Carlos, Guatemala University of Honduras Michoacán University, Mexico Univ. of Guadalajara, Mexico Univ. of Nuevo León, Mexico Univ. of San Luis Potosí, Mexico University of Yucatán, Mexico Cen. Hosp. of Managua, Nicaragua Nat. University of Paraguay Univ. of San Marcos, Peru University of Puerto Rico	3,574 1,066 3,262 5,328 2,918 10,211 20,715 20,544 1,502 3,502 5,574 260 10,585 820 5,929 6,810 548 959 2,334 7,976 107 967 632 2,698 10,998 9,337 467	3,574 1,066 3,262 5,328 2,918 10,211 20,715 20,544 1,502 3,502 5,574 260 10,585 820 5,929 6,810 548 959 2,334 7,976 107 967 632 2,698 10,998 9,337 467	
For the improvement of health services by providing educational experiences (usually in the United States) for young faculty members in the professional schools			
Mexican Braille Printing Plant A cooperative undertaking with the Junior League of Mexico, the Mexican Ministry of Health and the	10,000	6,984	3,016

	Appropriations	Payments 1954-55	Unpaid Appropriations August 31, 1955
American Foundation for Overseas Blind to provide equipment and materials to produce Braille text- books and literature for the blind of Mexico and Central America			
National University of Mexico  To improve pathology education and service in Mexico and to expand the Dept. of Pathology to include a section of Bacteriology, Parasitology, and Experimental Pathology	\$ 13,494	\$ 9,177	\$ 4,317
VISITING PROFESSORSHIPS  To finance visits by U. S. professors to serve as temporary faculty members and consultants to professional schools in Brazil, Chile, Colombia	1,500	1,500	
NURSING			
Min. of Health (SESP), Brazil University of Bahia, Brazil University of Brazil University of Recife, Brazil Univ. of Rio Grande do Sul, Brazil University of Chile Nat. University of Colombia Univ. of the Valley, Colombia Univ. of the Valley, Colombia University of Haiti Ministry of Health, Peru For the improvement of health services by providing educational experiences (usually in the United States) for young faculty members in the professional schools.	1,090 2,565 1,468 3,199 2,756 6,667 2,753 2,758 50 3,168	1,090 2,565 1,468 3,199 2,756 6,667 2,753 2,758 50 3,168	
Van Buren Sch. of Nursing, Chile University of El Salvador Univ. of the Valley, Colombia To provide library books and teaching aids to augment the teaching and research programs of professional schools employing former Foundation Fellows	660 843 590	660 843 590	

			Payments	Unpaid Appropriations
	Appro	priations	1954-55	August 31, 1955
VISITING PROFESSORSHIPS  To finance visits by U. S. professors to serve as temporary faculty members and consultants to professional institutions in Brazil and Chile	\$	1,162	\$ 1,162	\$
PUBLIC HEALTH				
World Health Organization  To provide educational experiences for professional personnel in various of the W. H. O. regional offices		4,441	4,441	
INSTITUTE OF NUTRITION CENTRAL				
AMERICA AND PANAMA  El Salvador Guatemala Panama Equipment A cooperative undertaking with the republics of Central America and Panama, and the Pan American Sanitary Bureau, for the development of the science of nutrition and its application to the problems of agriculture, education and health		3,658 3,688 2,326 4,553	3,658 3,688 2,326 4,553	
UNITE	ED ST.	ATES		
AGRICULTURE				
FARM YOUTH SHORT COURSES  To subsidize a conference of land- grant college short course directors and to publish a brochure to further agricultural short courses	\$	3,206	\$ 3,206	\$
Intensive Extension Service				
Cornell University Michigan State University North Carolina State College State College of Washington To develop improved and intensive techniques for disseminating agri- cultural information and encourag- ing its use by farmers, and to evalu- ate the effectiveness of the programs		75,000 .70,392 75,000 50,000	15,000 59,700 16,200 12,200	60,000 110,692 58,800 37,800

	Appropriations	Payments 1954-55	Appro	paid priations : 31, 1955
International Conference of Agricultural Economists  To provide transitional assistance for the Conference's Secretariat and domestic and Latin American fellowships for attendance at conferences in 1955 and 1958	\$ 59,000	\$ 12,500	\$	46,500
NATIONAL AGRICULTURAL EXTENSION CENTER FOR ADVANCED STUDY To establish at the University of Wisconsin a center for training agricultural administrators and to augment the effectiveness of the extension services	1,206,000	145,000	1,	.061,000
NATIONAL PROJECT IN AGRICULTURAL COMMUNICATIONS To hasten the application of agricultural research findings by improving communications between land-grant institutions, the USDA, and farmers	162,165	52,216		109,949
DENTISTRY				
AMERICAN DENTAL ASSOCIATION  For a survey of trends, problems and needs of dental education, research and practice	250,000			250,000
EDUCATION FOR TEACHING DENTISTRY Med. College of Va.—Conference University of Michigan To develop experimental graduate education programs for dental teachers	1,131 50,000	1,131 10,600		39,400
Medical College of Virginia  To develop a program of graduate and postgraduate dental education	4,910	4,910		
REGIONAL DENTAL EDUCATION SURVEY Western Interstate Commission for Higher Education To study the advisability of establishing a dental school in the Rocky Mountain area	7,000	7,000		

	Appropriations	Payments 1954-55	Unpaid Appropriations August 31, 1955
University of Colorado To assist the University of Colorado to explore the advisability of estab- lishing a school of dentistry within the University	\$ 10,000	\$ 10,000	\$
EDUCATION			
BATTLE CREEK CHILD GUIDANCE CLINIC For expanded services to children of Branch and Calhoun Counties	27,270	8,870	18,400
BATTLE CREEK PUBLIC SCHOOLS  For instructional equipment, medical books for hospital branch libraries, and for maintenance and insurance at the Clear Lake Public School Camp	33,063	5,457	27,606
BOARD FOR FUNDAMENTAL EDUCATION  To explore in two demonstration areas a concept of education involving self-help and group action for the solution of individual and community problems	88,800	44,500	44,300
Boys Clubs of America Toward administrative expenses of the national office, in aid to the well- being of urban youth in the crowded sections of our cities	25,000	25,000	
Continuing Education University of Georgia Michigan State University Wabash College To develop broad, comprehensive programs of continuing learning opportunities for people from most occupations and professions	1,538,700 490,750 50,000	601,400 490,750 25,000	937,300 25,000
COOPERATIVE PROGRAM IN EDUCATIONAL ADMINISTRATION Alabama Polytechnic Inst. Colorado State Dept. of Education Columbia Univ. (Teachers College) Eastern Kentucky State College Emory University	115,100 31,600 400,000 14,400 22,400	106,000	115,100 31,600 294,000 14,400 22,400

	Appropriations	Payments 1954-55	Unpaid Appropriations August 31, 1955
George Peabody Co. for Teachers Harvard University New Mexico Dept. of Education North Carolina State Dept.	\$ 135,917 283,313 36,000	\$ 77,517 121,313	\$ 58,400 162,000 36,000
of Public Instruction Ohio State University Oklahoma State Dept. of Education	25,400 64,040 36,000	64,040	25,400
Stanford University Texas Education Agency University of Arkansas	74,938 30,000 56,000	52,981	36,000 21,957 30,000
University of Chicago University of Georgia University of Kentucky	400,000 40,000	101,000	56,000 299,000 40,000
University of Mississippi University of North Carolina	29,800 38,000 24,466	<b></b>	29,800 38,000 24,466
University of Oregon University of South Carolina University of Tennessee	55,809 39,000 13,000	55,809	39,000 13,000
University of Texas West Virginia Dept. of Education American Association of	184,115 34,000	83,915 8,500	100,200 25,500
School Administrators  Developmental Committee  Nat. Conference of Professors of	50,000 1,081	23,000 1,081	27,000
Educational Administrators  To improve public school admin-	10,000	5,000	5,000
istration at national, state and local levels, through comprehensive pre- service and in-service educational programs. Also for improved com- munication of evolving administra- tive knowledge to school administra-			
tors, state departments of education, members of professional associations, and officials and faculties of teacher training institutions			
EDUCATION FOR RETARDED CHILDREN Michigan State Board of Edu.	35,347	12,365	22,982
Barry County Kalamazoo County Ottawa County Calhoun County	13,181 7,164 7,448 1,000	6,661 3,429 2,513 1,000	6,520 3,735 4,935
To explore the practicality of com- munity programs for trainable men- tally retarded children			

	Appropriations	Payments 1954-55	Unpaid Appropriations August 31, 1955
FOUNDATION FOR RESEARCH ON HUMAN BEHAVIOR Initial support to promote the solution of problems of human behavior as reflected in industry, government and social welfare	\$ 62,500	\$ 62,500	\$
GOODWILL INDUSTRIES OF BATTLE CREEK, INC. To aid in establishing a local chapter	22,580	7,080	15,500
W. K. Kellogg Biological Station of Michigan State University  For student housing as an aid to expanded graduate teaching and research activities	51,920	51,920	
MICHIGAN INSTITUTE OF LOCAL GOVERNMENT To improve the functioning of government at the local level through development of educational and informational programs	18,000	18,000	
NATIONAL ASSOCIATION OF EDUCATIONAL BROADCASTERS To improve educational broadcasting through establishment of an economical tape network and an interchange of information by member stations	42,743	42,743	
Wolverine Boys' and Girls' States Scholarships for attendance at "49th State" conferences for teaching fu- ture citizenship responsibilities to outstanding youth	325	325	
HOSPITALS			
DIAGNOSTIC SERVICES  Colorado Dept. of Public Health Minnesota State Health Dept.  For consultation services to local hospitals in the developing, strength- ening and coordinating of clinical laboratory and X-ray services	7,440 6,218	7,440 6,218	

	A	Appropriations Paym			Unpaid Appropriations August 31, 1955	
EDUCATION IN HOSPITAL ADMINISTRATION	ON					
Columbia University Emory University State University of Iowa University of Chicago University of Minnesota Association of Univ. Programs in Hospital Administration To improve the quality of hospital administration by strengthening and	\$	45,100 130,000 95,640 61,000 60,689 14,607	\$	32,300 40,000 34,460 20,000 22,489 14,607	\$	12,800 90,000 61,180 41,000 38,200
expanding university programs of education						
Evaluation of Medical Care in Host	PITA					
American College of Surgeons S. W. Michigan Hospital Council		20,000 60,000		20,000 60,000		
To provide medical education oppor- tunities through the evaluation of medical care in hospitals		00,000		00,000		
Indiana Hospital Association		8,329		6,772		1,557
To strengthen hospital administra- tion through the development of an experimental in-service education program for hospital trustees						
LAKEVIEW HOSPITAL ASSOCIATION		50,000				50,000
Grant toward construction of a hospital in the Battle Creek area						
RURAL HEALTH CENTERS						
Kalkaska County Hospital Mackinac Straits Mem. Hospital Russell Mem. Hospital, Onaway		17,360 4,200 700		6,800 2,279 700		10,560 1,921
To demonstrate the effectiveness of rural health centers in providing ef- ficient and economical health serv- ices to the community						
Southwestern Michigan Hospital Council		10,660		7,160		3,500
To reduce the cost of hospital care through effective group purchasing						

	Appropriations		Payments 1954-55	Appro	npaid opriations t 31, 1955
MEDICINE					
GRADUATE AND POSTGRADUATE EDUCATE University of Colorado University of Utah	\$ 15,000 24,670	\$	5,000 12,920	\$	10,000 11,750
To improve medical services through the strengthening of university edu- cational programs					
Institute of Agricultural Medicine	109,000		37,000		72,000
To establish at the State University of Iowa an Institute for research and the teaching of prevention as related to diseases and hazards of the agri- cultural environment					
SIGHT CONSERVATION					
California Dept. of Public Health Oregon State Health Department	101,827 $5,002$		31,765 5,002		70,062
The Franklin Institute	13,317	e	11,783		1,534
To explore the role of public health departments in the conservation of vision, and to develop sensory aids for the partially sighted and the blind					
Teaching of Preventive Medicine					
State University of New York Union UnivAlbany Medical Col. University of Louisville University of Maryland University of Oklahoma University of Utah Vanderbilt University Woman's Medical College of Pa.	100,927 52,937 87,155 78,250 65,384 75,011 27,000 17,581		27,167 26,338 18,250 21,135 29,068 15,557 10,000		100,927 25,770 60,817 60,000 44,249 45,943 11,443 7,581
To redesign undergraduate medical curricula to reinforce the student's understanding of the preventive aspects of disease with a greater comprehension of the social, economic and environmental factors related to the health of the individual, the family and the community					

	Appropriat	ions	Payments 1954-55		
NURSING					
GRADUATE EDUCATION IN NURSING Emory University University of Alabama University of Maryland University of N. Carolina University of Texas Vanderbilt University	\$ 61,8 78,1 82,8 51,4 65,2 58,4	150 320 166 220	18,490	\$	61,820 78,150 64,330 51,466 65,220 58,426
For development in cooperation with the Southern Regional Education Board, of Master's degree programs in specialized areas of nursing to prepare nursing leaders and educators for the entire South					
NATIONAL LEAGUE FOR NURSING	44,9	000	44,900		
For strengthening, through decentralization, services to state and local member associations and for augmenting nursing in-service education programs					
Nursing Service Administration					
Boston University Columbia Univ. (Teachers College) St. Louis University State University of Iowa Syracuse University University of Chicago University of Colorado University of Minnesota University of Texas University of Washington Wayne University Western Reserve University Evaluation Conference To improve the administration of nursing services—and ultimately	13,6 44,3 14,6 19,1 18,9 24,5 17,4 45,5 12,4 52,5 12,3 46,9 6,4	557 536 23 974 501 664 533 528 590 522	7,891 19,693 5,203 12,820 9,985 17,900 10,794 22,285 9,353 46,506 5,579 15,360 6,407		5,722 24,664 9,433 6,303 8,989 6,601 6,670 23,248 3,075 6,084 6,743 31,543
nursing care to the patient—through the development of comprehensive pre service and in-service education programs					
PRACTICAL NURSE EDUCATION					
State depts. of education of: Alabama	5,9	83	5,983		

	Appropriations		nents App	Unpaid propriations ast 31, 1955
Arkansas Florida Louisiana Mississippi Regional Evaluation To develop state-wide programs for the training of practical nurses to augment the services of professional nurses and, in some instances inservice training, to help meet the de-	\$ 9,539 11,604 1,857 423 8,700	11	,539 \$ ,604 ,857 423	8,700
mand for nursing services personnel REGIONAL IN-SERVICE EDUCATION Emory University To develop centers for undergraduate field experience and continuing education opportunities for nurses employed in the areas served by each center	5,600	5	,600	
PUBLIC HEALTH FIELD TRAINING — STATE DEPARTMENTS OF HEALTH Massachusetts Washington To develop field training centers for public health physicians, dentists, nurses and sanitarians	33,681 7,612		.,460 ,612	19,221
GERONTOLOGY Colorado Dept. of Health Harvard University To explore the roles of state health departments and of educational agencies in the study and initiation of experimental programs relative to the problems of the aged and the elderly chronically ill	13,735 57,997		5,901 ,646	7,834 26,351
Home Accident Prevention State depts. of health of: California Georgia Kansas Kentucky Maryland Massachusetts North Carolina Oregon	52,538 63,360 31,952 54,460 44,377 50,737 62,094 17,059	29 18 36 14 22 23	,051 ,420 5,618 5,304 4,272 2,888 5,462 0,251	21,487 33,940 13,334 18,156 30,105 27,849 38,632 7,808

	Appropriations	Payments 1954-55	Unpaid Appropriations August 31, 1955
Local health departments of: Cambridge, Massachusetts Richland County, Ohio San Jose, California National Safety Council Conference To determine the role of state and local health departments in the reduction of home accidents	\$ 10,096 9,522 8,906 20,000 1,400	\$ 10,096 9,522 8,906 10,000 434	\$ 10,000 966
Michigan Health Council To help coordinate health education services throughout Michigan	250	250	
NATIONAL SANITATION FOUNDATION  To expand the testing laboratory program which establishes national standards for the manufacture of food services equipment	39,374	33,933	5,441
New York CITY BOARD OF HEALTH For a comprehensive revision of the New York City Sanitary Code and its regulations	30,000	10,000	20,000
University of Michican  To develop an undergraduate educational program for administrators in the health fields	36,232	31,211	5,021
GENERAL			
BATTLE CREEK Assistance to the local programs of the American National Red Cross, the Community Chest and the Hu- mane Society	8,688	8,688	
W. K. Kellogg Biography To make available to the general public and to educational and health agencies a story of American opportunity through the medium of a biography of the life of our founder	11,305	11,305	
Refunds on payments made in prior years Administration Appropriated but not committed	(12,976) 395,061 3,936,395	(12,976) 395,061	3,936,395
	\$15,847,427	\$4,781,624	\$11,065,803

# SECURITIES HELD AUGUST 31, 1955

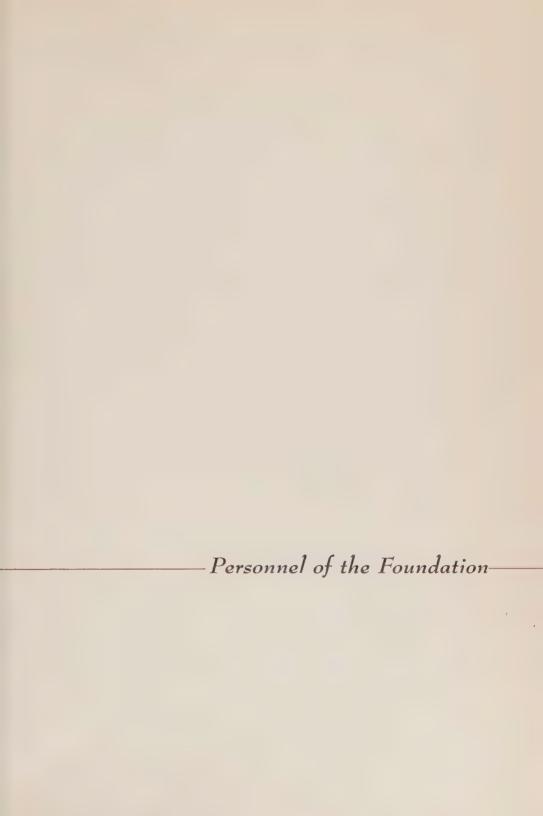
noving	FACE AMOUNT	BOOK AMOUNT	MARKET VALUE
BONDS	AMOUNT	AMOUNT	VILLUL
U. S. GOVERNMENT			
Treasury Notes			
1¾s due 12-15-55	\$ 466,000	\$ 460,903	\$ 465,417
Treasury Bonds			
2½s due 3-15-58/56	573,000	576,937	572,106
24/s due 9-15-59/56	500,000	504,702	490,000
2%s due 3-15-59/57	550,000	550,546	542,954
2%s due 9-15-61	200,000	200,230	198,124
24s due 12-15-62/59	500,000	503,828	481,250
2½s due 6-15-62/59	1,382,000	1,398,449	1,329,318
2½s due 11-15-61	378,000	378,000	368,316
2½s due 6-15-69/64	550,000	532,812	522,841
3½s due 6-15-83/78	945,000	959,113	985,748
2½s due 8-15-63	351,000	351,000	339,593
Savings Bonds–Series G			
2½s due 9-1-55	100,000	100,000	100,000
2½s due 12-1-55	50,000	50,000	49,600
2½s due 1-1-56	100,000	100,000	99,200
2½s due 5-1-57	150,000	150,000	146,850
2½s due 2-1-58	100,000	100,000	97,600
2½s due 1-1-59	36,000	36,000	34,920
2½s due 3-1-59	64,000	64,000	62,080
2½s due 1-1-60	100,000	100,000	96,400
2½s due 4-1-61	100,000	100,000	95,500
2½s due 1-1-62	100,000	100,000	95,200
Savings Bonds–Series K			
2.76s due 1-1-66	200,000	200,000	195,800
2.76s due 3-1-66	200,000	200,000	195,800
2.76s due 1-1-67	200,000	200,000	198,400
Public Utility			
Appalachian Electric Power Co.			
3½% Ser. Note, due 10-1-61	50,000	52,633	50,285
3½% Ser. Note, due 10-1-63	150,000	157,707	150,150
3 <sup>1</sup> / <sub>4</sub> s due 12-1-70	100,000	103,973	100,500
Atlantic Pipe Line Company	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	200,000
3s due 1-15-60	147,200	143,745	146,258
Bell Telephone Co. of Pa.		110,110	110,200
5s due 10-1-60/57	100.000	106 000	100 500
'	100,000	106,938	103,500
Columbia Gas System, Inc.			
3½s due 7-1-79	100,000	102,298	100,750

BONDS		FACE AMOUNT		BOOK AMOUNT		MARKET VALUE
Detroit Edison Company						
3½s due 8-1-59	\$	270,000	\$	270,000	\$	268,650
Great Lakes Pipe Line Company	,	,	Ŧ		Ψ.	200,000
4s due 2-1-74		116,000		116,000		116,000
New England Telephone & Tel.						,,,,,,,
4½s due 5-1-61/58		250,000		266,439		258,438
Northern Illinois Gas Company						
3½s due 1-1-79		200,000		207,559		204,000
Northern Natural Gas Company		1 20 000				
3½s due 11-1-73		150,000		152,490		149,250
Panhandle Eastern Pipe Line Co.		150,000		140.005		7.45 500
3½s due 11-1-74		150,000		149,625		145,500
Public Service Electric & Gas Co. 3s due 11-1-63		150,000		150 700		140 500
Southern California Edison Co.		150,000		152,709		148,500
3s due 9-1-65		150,000		153,707		140 105
Southern Natural Gas Company		150,000		155,707		148,125
4s due 5-1-73		191,000		189,090		195,775
Tennessee Gas Transmission Co.		101,000		100,000		130,110
35/8s due 6-1-74		198,000		202,165		200,970
Wisconsin Public Service Corp.		200,000				200,010
3½ due 1-1-71		100,000		103,721		100,000
				,		
RAILROAD EQUIPMENT TRUST CTFS.						
Chicago, Burlington & Quincy R.R.						
25/s due 7-1-63		50,000		50,000		47,815
25/ss due 7-1-64		50,000		49,891		47,375
25%s due 7-1-65		50,000		49,764		47,215
25/s due 7-1-68		50,000		49,279		46,620
Great Northern Railway		75 000		75 061		70.000
2s due 12-1-57		75,000		75,261 75,207		72,923 72,465
2s due 6-1-58 2%s due 10-1-58		75,000 225,000		224,995		222,390
Illinois Central Railroad		220,000		224,000		222,000
Series 37—3s due 3-1-65		50,000		49,380		48,810
Series 37—3s due 3-1-66		50,000		49,207		48,740
Louisville & Nashville R.R.		00,000		10,201		10,110
3.20s due 1957-66		208,800		208,800		205,250
Northern Pacific Railway		200,000		200,000		,
2 <sup>3</sup> / <sub>4</sub> s due 3-30-57		100,000		99,335		99,040
Southern Pacific Company		100,000		00,000		00,010
Ser. KK-3%s due 9-1-66		100,000		99,739		100,400
Wabash Railroad		100,000		00,100		200,100
Ser. E-3\%s due 9-1-65/58		100,000		98,044		98,190
		100,000		00,011		00,100
Western Maryland Railway Series P—3s due 7-1-57		100,000		100,137		99,410
Selles 1—02 due 1-1-01		200,000		200,201		00,220

BONDS		FACE AMOUNT		BOOK AMOUNT		MARKET VALUE
OTHER CORPORATE						
Aluminum Co. of America	ф	250 000	ф	050 001	ф	950 605
3%s due 2-1-64 3s due 6-1-79	\$	250,000 100,000	\$	252,221 100,000	\$	250,625 97,500
Associates Investment Co. Notes		100,000		100,000		01,000
3½s due 2-1-67		250,000		250,000		250,000
Burroughs Adding Mach. Co. Deb. 3%s due 6-1-77		200,000		209,664		203,000
Celanese Corp. of America Deb. 3s due 10-1-65		100,000		100,742		97,250
Commercial Invest. Trust Notes 3s due 6-1-57		500,000		504,339		495,600
General Finance Corp. Note		£00,000		<b>E</b> 00.000		<b>500 000</b>
3 <sup>3</sup> / <sub>4</sub> s due 10-27-57		500,000		500,000		500,000
General Motors Acceptance Corp. Deb. 3%s due 9-15-61/55		200,000		199,000		203,000
Deb. 4s due 7-1-58		200,000		200,000		202,750
Note 4s due 6-1-73, Sr. Oblig.		200,000		200,000		205,920
General Motors Corp. S. F. Deb. 3¼s due 1-1-79		100,000		100,470		100,250
Gerber Products Co. S. F. Deb. 4s due 4-15-69		250,000		250,000		258,750
Household Finance Corp. Deb. 4%s due 9-1-68/56		100,000		100,500		100,000
Interstate Oil Pipe Line Co. 31/s due 3-1-77		148,000		151,976		146,520
Kellogg Company Notes 3¼s due 1957-61		2,500,000		2,500,000		2,500,000
Koppers Company 3s due 10-1-64		99,000		99,706		96,525
Libby, McNeill & Libby 3½s due 5-15-79		97,000		97,000		93,207
Mathieson Chemical Corp. Ser. A-4½s due 11-1-87		100,000		105,485		106,500
National Supply Company Deb. 2¾s due 6-1-67		100,000		98,000		95,000
Pacific Finance Corporation 3½s due 7-1-65		41,000		40,590		40,488
Peabody Coal Co. 1st S. F. Ser. B. 4½s due 4-15-72		100,000		102,324		100,500
Pittsburgh Plate Glass S. F. Deb. 3s due 4-1-67		150,000		153,895		149,250
Reigel Paper Corp. S. F. Deb. 3\%s due 5-1-80		100,000		100,023		99,500

BONDS		FACE AMOUNT	BOOK AMOUNT		MARKET VALUE
Service Pipe Line Co. S. F. Deb. 3.20s due 4-1-82	\$	300,000	\$ 308,808	ø	900 500
Shamrock Oil & Gas S. F. Deb.	φ	000,000	φ 300,000	\$	298,500
3½s due 4-1-67		190,000	195,429		190,000
U. S. Steel Corp. Serial Deb.			·		
2½s due 8-1-60		200,000	200,000		195,000
2.55s due 8-1-61		200,000	200,000		194,500
2.60s due 8-1-62 2.65s due 8-1-63		200,000	200,000		194,000
2.65s due 8-1-64		200,000	200,000 200,000		193,500 193,000
Westinghouse Air Brake		200,000	200,000		190,000
37/ss due 9-1-78		100,000	99,500		102,000
Canadian					
Dominion Victory Loans					
5th Ser. L-7 3s due 1-1-59/56		100.000	07 075		101 077
		100,000	97,875		101,375
Province of Ontario Deb. 3¼s due 9-1-72/56		200,000	201,984		195,520
Toronto Consol. Loan Deb.		# W 000			
3%s due 12-1-59		15,000	15,046		14,850
3½s due 12-1-60 3½s due 12-1-61		15,000 10,000	15,019 9,982		14,850 9,900
3%s due 12-1-61		15,000	14,913		14,850
3½s due 12-1-68		25,000	24,750		24,500
3%s due 12-1-69		20,000	20,000		19,800
3%s due 12-1-70		55,000	55,000		54,450
3%s due 12-1-71		45,000	44,888		44,550
Vancouver, B. C., Deb.					
4 <sup>1</sup> / <sub>4</sub> s due 10-15-73		250,000	251,552	_	265,000
	\$2	0,476,000	\$20,597,039	\$2	0,318,591
				-	
COMMON STOCKS		SHARES	BOOK AMOUNT		MARKET VALUE
Aluminum Co. of America		5,400	108,040		399,600
Atlas Properties, Incorporated		500	5,000		1.
Central Illinois Light Co.		3,335	124,090		178,423
Central & South West Corp.		5,300	180,200		176,887
Commonwealth Edison Co.		3,000	79,231		138,750
Consumers Power Company		6,050	215,948		301,743
Continental Oil Co. of Del.		4,000	65,877		346,000 314,737
Dow Chemical Company		5,450	57,448		625,625
E. I. DuPont de Nemours & Co.		2,750 2,100	261,976 42,931		167,738
Eastman Kodak Company		2,100	42,001		101,100

COMMON STOCKS	SHARES	BOOK AMOUNT	MARKET VALUE
First National City Bank of N.Y.	4,270	\$ 175,180	\$ 269,010
General Electric Company	9,600	212,418	508,800
General Motors Corporation	3,000	68,860	383,625
B. F. Goodrich Company	3,000	100,455	210,000
W. T. Grant Company	3,800	74,333	144,400
Guaranty Trust Co. of N.Y.	3,350	193,330	265,487
Gulf Oil Company	1,799	86,470	152,016
Harris Trust & Savings Bank	720	194,000	385,200
Indianapolis Power & Light Co.	12,570	232,932	392,812
Inland Steel Company	2,700	109,770	217,350
International Bus. Machines Corp.	1,100	184,094	444,400
International Paper Company	1,848	75,618	200,508
Kellogg Company	700	16,450	24,238
Minnesota Mining & Mfg. Co.	2,500	104,688	252,500
Monsanto Chemical Company	9,000	137,989	411,750
National Bank of Detroit	5,000	188,335	372,500
National Lead Company	4,200	106,752	332,850
National Steel Corporation	3,000	101,745	210,000
New York State Elec. & Gas Corp.	7,425 900	235,559 11,203	317,419
Northern Illinois Gas Co.	3,600	179,825	19,912
Pacific Gas & Electric Co.	2,000	53,022	189,450 192,000
J. C. Penney Company Peoples Gas Light and Coke Co.	1,800	224,901	286,200
Pittsburgh Plate Glass Co.	4,120	144,276	348,140
Procter & Gamble Company	2,308	131,676	234,839
Public Service Co. of Colorado	7,100	204,249	318,613
G. D. Searle & Company	2,850	58,309	275,025
Secur. 1st Nat'l Bank – Los Angeles	7,000	190,775	413,000
Standard Oil Co. of California	3,408	206,528	309,276
Standard Oil Co. of Indiana	7,600	147,182	376,200
Standard Oil Co. of New Jersey	3,939	123,215	532,750
Swift & Company	4,200	192,175	213,675
Texas Company	4,920	117,857	504,915
Union Carbide & Carbon Corp.	4,000	138,067	422,500
Union Electric Co. of Mo.	5,800	173,525	174,000
United Gas Corporation	8,800	176,626	282,700
United States Gypsum Co.	1,000	78,059	281,000
West Va. Pulp & Paper Co.	5,200	104,941	237,250
Weyerhaeuser Timber Company	1,000	37,360	142,000
Wisconsin Public Service Co.	7,900	181,670	181,700
Preferred Stocks			
Kellogg Company	83,883	7,638,480	8,052,768
Northern Illinois Gas Co.	1,000	165,000	190,000
		\$14,418,640	\$22,322,282



#### PERSONNEL OF THE FOUNDATION

#### BOARD OF TRUSTEES

W. P. Butler, 1941-Battle Creek, Michigan

GLENN A. CROSS, 1933-President, Legitimate Theatre Corporation Battle Creek, Michigan

HAVEN EMERSON, 1937-Professor Emeritus of Public Health Practice, Columbia University New York, New York

Emory W. Morris, 1936-President, W. K. Kellogg Foundation, Battle Creek, Michigan

RICHARD E. PRITCHARD, 1953-Financial Counsel, Chicago, Illinois Fred Sherriff, 1931-1936; 1951-President, Sherriff-Goslin Company Battle Creek, Michigan

John O. Snook (Honorary), 1953-Concannon, Dillon & Snook, Attorneys Chicago, Illinois

W. H. Vanderploeg, 1936-President, Kellogg Company Battle Creek, Michigan

HENRY F. VAUGHAN, 1933-Dean, School of Public Health, University of Michigan Ann Arbor, Michigan

Bessie Rogers Young, 1933-Battle Creek, Michigan

Andrew Pattullo, (Honorary)\*
Director, Division of Hospitals,
W. K. Kellogg Foundation
Battle Creek, Michigan

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GLENN A. CROSS, Chairman

ORVILLE L. DEBOLT, Secretary

RICHARD E. PRITCHARD

EMORY W. MORRIS

W. H. VANDERPLOEG

<sup>\*</sup>For 1954-55. This honorary (non-voting) trusteeship rotates annually among the senior staff members.

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> VICE PRESIDENT GLENN A. CROSS

SECRETARY LEONARD L. WHITE

TREASURER ORVILLE L. DEBOLT

ASSISTANT SECRETARY AND ASSISTANT TREASURER BESSIE ROGERS YOUNG

DIRECTOR OF PUBLICATIONS HOBACE B. POWELL

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LATIN AMERICAN DIVISION

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DIVISION OF DENTISTRY Philip E. Blackerby, Jr., Director

DIVISION OF MEDICINE AND Public Health

DIVISION OF EDUCATION Maurice F. Seay, Director Robert G. VanDuyn, Associate Dir. Matthew R. Kinde, Director Herbert H. Hasson, Associate Director

DIVISION OF HOSPITALS Andrew Pattullo, Director DIVISION OF NURSING Mildred L. Tuttle, Director Amy E. Viglione, Associate Director

UNITED KINGDOM REPRESENTATIVE - Richard P. Taylor

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Dean W. Colvard
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Durward B. Varner Vice President for Off-Campus Education, Michigan State University
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DENTISTRY
MAYNARD K. HINE Dean, School of Dentistry, Indiana University
Walter J. Pelton
Shailer PetersonSecretary, Council on Dental Education, American Dental Assn.
JOSEPH F. VOLKER  Dean, School of Dentistry, University of Alabama
EDUCATION
Paul HannaLee Jacks Professor of Child Education, School of Education, Stanford U.
CYRIL O. HOULEProfessor of Education, Department of Education, University of Chicago
Francis Keppel  Dean, Faculty of Education, Harvard University
JOHN K. NORTON  Professor of Education, Teachers College, Columbia U.
RALPH W. TylerDirector, Center for Advanced Study in the Behavioral Sciences

#### HOSPITALS

E. DWIGHT BARNETTProf. of Adminis. Med., School of Public Health and Adminis. Med., Columbia University
George BucheePresident, Health Information Foundation, New York, New York
GEORGE CARTMILL  Director, Harper Hospital, Detroit, Michigan
James P. Dixon  Commissioner of Health, Philadelphia, Pennsylvania
Jack Masur  Chief, Bureau of Med. Services, U. S. Public Health Service
MEDICINE AND PUBLIC HEALTH
JOHN Z. BOWERS  Dean, Medical School, University of Wisconsin
A. C. Furstenberg  Dean, Medical School, University of Michigan
HERMAN E. HILLEBOE  Commissioner of Health, State of New York
Ernest L. StebbinsDirector, School of Hygiene and Public Health, Johns Hopkins University
NURSING
Marjorie Bartholf Dean, School of Nursing, University of Texas
Lulu K. HassenplugDean, School of Nursing, University of California at Los Angeles
Eleanor C. LambertsenInstructor, Division of Nursing Education, Teachers College, Columbia U.
Marion SheahanDirector, Division of Nursing Services, National League for Nursing

#### FORMER TRUSTEES

(With Years of Trusteeship Indicated)

*Lewis J. Brown, 1930-31
*M. Concannon, 1943-53
George B. Darling, 1934-43
*Earle J. Freeman, 1930-33
*Burritt Hamilton, 1930-33
*John L. Kellogg, Jr., 1931-35
*W. K. Kellogg, 1934-51
Eugene H. McKay, 1930-36
George C. McKay, 1934-37
*Stuart Pritchard, 1930-40
*A. C. Selmon, 1930-31 President 1930
Wm. S. Sadler, 1940-41
Wendell L. Smith, 1930-33 President 1930-33

#### FORMER ADVISORY COMMITTEE MEMBERS

(Position indicated that held at time of committee membership)

#### DENTISTRY

JOHN W. KNUTSON (1945-53)
HAROLD HILLENBRAND (1945-54) Secretary, American Dental Association
PAUL H. JESERICH (1945-52)Dean, School of Dentistry, University of Michigan

### EDUCATION

EDUCATION
Laurence D. Haskew (1951-52)
Dean, College of Education, University of Texas
E. B. Norton (1948-50)
President, State Teachers College, Florence, Alabama
Wilbur Schramm (1951-55)

...... Director, Institute of Communications Research, University of Illinois

<sup>\*</sup>Deceased

MAURICE F. SEAY (1944-50)
Ralph Ulveling (1946-48)
HOSPITALS
Harvey Agnew (1951-54)
*A. C. Bachmeyer (1952-53) Director Emeritus, University of Chicago Clinics
ROBIN C. BUERKI (1944-50)
Vice Pres. in Charge of Medical Affairs, U. of Pa.
James A. Hamilton (1944-54) Director, Course in Hospital Adminis., University of Minnesota
Basil C. MacLean (1944-50)
Director, Strong Memorial Hospital, Rochester, N. Y.
JOHN R. MANNIX (1944-48)Director, Cleveland Hospital Service Assn., Cleveland
LIBRARY
MISS NORA BEUST (1944-46)  Library Service Division, U. S. Office of Education
Leon Carnovsky (1944-46)
RALPH A. ULVELING (1944-46)  Head Librarian, Detroit Public Library
MEDICINE AND PUBLIC HEALTH
RAYMOND B. ALLEN (1946-48)  President, University of Washington
Gregoire F. Amyot (1944-48)  Provincial Health Officer, British Columbia
Walter A. Bloedorn (1950-54)Dean, School of Medicine, George Washington University
LEROY E. Burney (1950-54) State Health Commissioner, Indiana
Ward Darley (1949-53)  Dean, School of Medicine, University of Colorado
*Deceased

Henry F. Helmholz (1944-46)  Director of Pediatrics Section, Mayo Clinic
F. W. Jackson (1948-49)  Department of Nat'l. Health and Welfare, Canada
C. W. Klassen (1946-50)  Chief Sanitary Engineer, Dept. of Public Health, Illinois
Hugh R. Leavell (1944-50)  Professor of Public Health Practice, Harvard University
Currier McEwen (1948-50)  Dean, School of Medicine, New York University
Samuel Proger (1946-50)  Medical Director, Joseph H. Pratt Diagnostic Hospital, Boston
Donal Sheehan (1946-48)  Professor of Anatomy, New York University
W. G. SMILLIE (1945-50)Department of Public Health and Preventive Medicine, Cornell University
NURSING
Genevieve Bixler (1952-54)  Educational Consultant
H. Lenore Bradley (1949-53)
LEAH BLAISDELL BRYAN (1944-46)
Helen Bunge (1947-50)  Dean of Nursing, Western Reserve University
Marie Farrell (1952-54)Professor of Nursing, School of Nursing, Boston University
Katherine Faville (1951)Dean, College of Nursing, Wayne University
RUTH B. FREEMAN (1944-47)Dir., Course in Public Health Nursing, U. of Minn.
MYRTLE KITCHELL (1952-54)Dean, College of Nursing, State University of Iowa
RUTH KUEHN (1947-51)  Dean, School of Nursing, University of Pittsburgh
LUCILE PETRY LEONE (1944-51)
MINNIE POHE (1944-47)

——Appendices -

## INTERNATIONAL FELLOWSHIPS, 1954-55

Following the name of each fellow is shown the university or agency in behalf of which the fellowship was awarded. The fellowships listed are those on which payments were begun during the fiscal year. The subject matter of the awards is indicated where not implied by professional degrees or designations following names.

### **BRAZIL**

Celso Antonio de Carvalho, M.D.	University of São Paulo
*Mário de Magalhães Chaves, D.D.S	
Heonir de Jesus Pereira Da Rocha, M.D	University of Bahia
Thales DE Brito, M.D.	University of São Paulo
Eros Abrantes Erhart, M.D.	University of São Paulo
Isabel Colquhoun MacIntyre, R.N.	Serviço Especial de Saúde Pública
*Heitor da Costa Pinto MARBACK, M.D	University of Bahia
Waleska Paixao, R.N.	University of Brazil
Edilburga Pereira, R.N.	University of Brazil
*Marina de Andrade Resende, R.N.	Serviço Especial de Saúde Pública

### CANADA

Hazlett Saunders Crosby, D.D.S.	Dalhousie University
George Murray Dewis, D.D.S.	Dalhousie University
Edward William Beaugrand Donohue, D.D.S	
Donald Kepron, D.D.S.	McGill University
Jean Georges Yergeau, D.D.S.	University of Montreal

#### CHILE

Victorino Farga Cuesta, M.D.	University of Chile
*Hugo Garcia Urtubia, M.D.	
Jorge Litvak Lijavetzky, M.D.	
Marcelino Varas Fuenzalida, M.D.	
Hernan Velasquez Pizarro, D.D.S.	

### COLOMBIA

Arturo R. Alavarez H., M.D.	University of Cartagena
David Botero Ramos, M.D.	University of Antioquia
Jesus Botero Angel, M.D.	University of Antioquia
Eduardo Canon Bravo, M.D.	University of the Valley
Hernando Duque Valderrama, D.D.S. Nation	al University of Colombia
Mauricio Duque Hernández, D.D.S.	University of Antioquia
*Jorge Garcia Gómez, M.D. Nation	al University of Colombia
Javier Restrepo Isaza, D.D.S.	University of Antioquia

Second Fellowship

## COSTA RICA

Clodomiro Mora Rojas, D.D.S	ea
EL SALVADOR	
Raul Antonio Arguello Escolán, M.D.  University of El Salvad Gustavo Oriani Hijo, M.D.  University of El Salvad	or or
ENGLAND AND WALES	
Peter Gorham Boulden (Agriculture)	eil on od on eil eil on ty od eil on
GUATEMALA	
Donald Joseph Byrne Montano, D.D.S	os
HONDURAS	
Manuel Jesus Rivera H., M.D	as
IRELAND	
Olivia Henrietta Agnes Hughes (Education) Irish Countrywomen's Association Doreen Frederica Smith (Education) Irish Countrywomen's Association	on on
MEXICO	
Luis Landa Verdugo, M.D	osi co ón co ún ra

<sup>\*</sup>Second Fellowship

### THE NETHERLANDS

	3. 2. 12 0	
Grietje van Randen (Agriculture)	State Agricultural University	
NORTHERN IRELAND		
David Willis Robinson (Agriculture)	Ministry of Agriculture	
PARAGUAY		
Faustino Centurion Molina, M.D Lilia Gonzalez (Basic Medical Sciences) Luis Carlos Maas, M.D Omar Domingo Sosa Trinidad, M.D	Ministry of Health National University of Paraguay	
PUERTO RICO		
Lorenzo Galindo, M.D.	University of Puerto Rico	
SCOTLAND		
Alexander John Bean (Agriculture)  David Robert Bisset (Agriculture)  Douglas Scott Falconer (Agriculture)  Robert John Forsyth (Agriculture)  Robert John Forsyth (Agriculture)  John Getty (Agriculture)  North of Scotland Coll. of Agr.  Alexander Reid Hill (Agriculture)  Alfred John Holding (Agriculture)  Lang (Agriculture)  The West of Scotland Coll. of Agr.  George Inglis Armour Lang (Agriculture)  The West of Scotland Agr. Coll.  Ian Watson Mitchell (Agriculture)  North of Scotland Coll. of Agr.  Ronald John Trueman Pennington (Agriculture)  Agricultural Research Council  John Basil Alexander Rodger (Agriculture)  Edinburgh and East of Scotland  College of Agriculture  Alexander Martin Smith (Agriculture)  Edinburgh and East of Scotland  College of Agriculture  Helen Lawrie Smith (Agriculture)  Edinburgh and East of Scotland  College of Agriculture		

# RECIPIENT AGENCIES OF FOUNDATION ASSISTANCE 1930-1955

Listed on the following pages are the agencies to which the Foundation has provided assistance during its first quartercentury of activities. Each recipient agency is listed but once although many have been provided assistance for several types of program activities.

For the sake of brevity, certain categories of assistance have not been included because their delineation would require a sizeable publication. For example, during the depression years of the 1930s, the Foundation provided assistance to 663 rural schools to modernize their educational facilities as an interim endeavor looking to the day when the communities could provide even better educational opportunities for their children. Also in the early 1930s more than 900 school and community libraries in the seven counties of the Michigan Community Health Project area were assisted in the purchase of recreational and text books.

During the 1930s and early 1940s in excess of 1,100 fellow-ships were granted for field experiences to train outstanding public health personnel for the health service agencies of this country. Also during the MCHP activities thousands of scholarships were provided for the purpose of community betterment and improvement of our country's educational and health programs. For example, in just one year, 4,796 scholarships were awarded for postgraduate study by 155 dentists, physicians and laboratory technicians; 100 superintendents of schools and high school principals; 3,997 elementary and secondary school teachers; 495 members of school boards, and 49 school engineer-custodians. The agencies benefiting from these categories of assistance are not included in the following tabulation:

# RECIPIENT AGENCIES OF FOUNDATION ASSISTANCE 1930-1955

Adelphi College (N. Y.) Agricultural and Mech. Col. of Texas Agricul, Research Council of England Alabama State Dept. of Education Alabama Polytechnic Institute Alabama, University of Department of Biology Medical College of Alabama School of Dentistry School of Nursing Alagoas, University of (Brazil) Faculty of Medicine Albright College (Pa.) Alberta, University of (Canada) Faculty of Dentistry Faculty of Medicine Faculty of Nursing Alcoholics Anonymous, Battle Creek Chapter Alfred University (N.Y.) Dept. of Nursing Allegan (Mich.) Com. Health Center Allegan (Mich.) County Health Dept. Allen-White School (Whiteville, Tenn.) American Assn. of Sch. Administrators American-British Cowdray Hospital (Mexico) American Camping Association American Cancer Society, Battle Creek Chapter American College of Surgeons American Council on Education American Dental Association American Foun. for the Blind, Inc. American Foun. for Overseas Blind American Hospital Association American Medical Association American Mer. Marine Library Assn. American National Red Cross American Occupational Therapy Assn. American Printing House for the Blind American Public Health Association American Univer., The (Wash., D.C.)

Faculty of Dentistry Faculty of Medicine Arizona State Teachers College Arkansas State Dept. of Education Arkansas, University of School of Medicine Asociatión Civil Filantrópica y Educativa (Mexico) Associated Hospitals of Manitoba Assn. of American Medical Colleges Association of Land-Grant Colleges and Universities Association of University Programs in Hospital Administration Athenee Royal De Seraing (Belgium) Atlanta-Southern Dental School (Ga.) Austin Peav State College (Tenn.) Austin-Travis-Bastrop County (Texas) Health Dept. Azusa Valley (Calif.) Sanitarium and Rest Home Bahia, University of (Brazil) Faculty of Medicine School of Nursing Baraga County (Mich.) Mem. Hosp., L'Anse Barry County (Mich.) Association for Retarded Children Barry County (Mich.) Health Dept. Battle Creek, City of Alcoholics Anonymous American Cancer Society American National Red Cross Board of Education Boy Scouts of America Camp Fire Girls, Inc. Child Guidance Clinic Civic Reacreation Association Community Fund and War Chest Community Hospital Association Dental Society Department of Public Safety Goodwill Industries, Inc. Humane Society, Calhoun County

Antioquia, University of (Colombia)

Dept. of Biology

Battle Creek, City of: Cont'd. Lakeview Hospital Association Leila Post Montgomery Hospital Mich. Multiple Sclerosis Center Ministerial Association Salvation Army Willard Library Youth Building Baylor University (Texas) College of Dentistry College of Medicine School of Nursing Bedford-Marshall District (Tenn.) Health Department Beneficencia School of Nursing (Chile) Beyer Mem. Hosp. (Ypsilanti, Mich.) Blodgett Mem. Hosp. (Grand Rapids) Board for Fundamental Education (Indianapolis) Board for the Investigation of Epidemic Diseases in the Army Boston School of Occup. Therapy Boston University Dept. of Physical Therapy School of Medicine School of Nursing Boy Scouts of America, Battle Creek Area Council Boys' Clubs of America, Inc. Branch County (Mich.) Health Dept. Branch County (Mich.) Library Brazil, University of Faculty of Dentistry Faculty of Medicine School of Nursing Brazilian Braille Printing Plant Brigham Young University (Utah) British Broadcasting Corporation British Columbia, University of Faculty of Applied Science Bronson Hospital (Kalamazoo) Bucknell University (Pa.) Dept. of Bacteriology Buffalo, University of School of Dentistry School of Medicine School of Nursing Butler University (Ind.) Department of Zoology

Calhoun County (Mich.) Assn. for the Mentally Retarded Calhoun County (Mich.) Health Dept. Calhoun Co. (Mich.) Humane Society Calhoun Co. (Mich.) School Board California Institute of Technology California State Dept. of Public Health California State Dept. of Public Instr. California State Polytechnic College Kellogg-Voorhis Unit California, University of Cambridge (Mass.) Health Dept. Camp Fire Girls, Inc., Battle Creek Chapter Canadian Assn. for Adult Education Canadian Dental Association Canadian Education Association Canadian Hospital Association Canadian Hospital Council Canadian Public Health Association Carlos Van Buren Sch. of Nurs. (Chile) Cartegena, University of (Colombia) Faculty of Medicine Case Institute of Technology (Ohio) Cass County (Michigan) Health Dept. Catholic U. of America (Wash., D.C.) School of Nursing Education, Undergraduate Division Central University of Ecuador Faculty of Medical Sciences Chatham-Lee-Orange-Person (N. C.) District Health Dept. Chicago, University of Dept. of Education Division of Nursing Education Education Communications Serv. School of Business School of Medicine Children's Hospital (Mexico, D. F.) Chile, University of Faculty of Biol. & Med. Sciences Faculty of Dentistry Faculty of Medicine School of Hygiene School of Nursing Cincinnati, University of College of Medicine College of Nursing and Health College of Med. Evangelists (Calif.)
Loma Linda Sanitarium & Hosp.
School of Medicine
School of Nursing
School of Physical Therapy
College of Physicians and Surgeons
(Son Francisco)

(San Francisco)
Dental School

Medical School
College of William and Mary (Va.)
Dept. of Occupational Therapy
of the Richmond Prof. Institute

Colombia, National University of

Faculty of Dentistry Faculty of Medicine School of Nursing

Colorado State Dept. of Education Colorado State Dept. of Public Health Colorado, University of

School of Dentistry School of Medicine School of Nursing

Columbia University

College of Physicians & Surgeons
De Lamar Inst. of Public Health
Dept. of Occupational Therapy
Dept. of Physical Therapy
School of Dental & Oral Surgery
School of Public Health and
Administrative Medicine
Teachers College
Teachers College—Divsion of

Comité des Hospitaux du Québec Community Health Center of Branch Co. (Mich.)

Nursing Education

Community Health Center of Mesick (Mich.) Inc.

Community Hospital Association (Battle Creek)

Concepción, University of (Chile) School of Medicine School of Nursing

Connecticut State Dept. of Education Córdoba, National Uni. of (Argentina) Faculty of Medicine

Cornell University

College of Ágriculture Medical College New York Hos. School of Nursing Costa Rica, University of
Faculty of Dentistry
Creighton University (Nebr.)
Creighton Memorial St. Joseph's
Hospital School of Nursing
School of Medicine

Dalhousie University (Nova Scotia)
Faculty of Dentistry
Faculty of Medicine

Dartmouth College (N. H.)
Medical School

Delaware State Dept. of Public Instr. Delta School District (Millett, Mich.) Delton (Mich.) W. K. Kellogg School Denver, University of

Dept. of Agriculture for Scotland Detroit, City of, Dept. of Health

Detroit, University of School of Dentistry

Dickinson County Memorial Hospital (Iron Mountain, Mich.)

Drury College (Mo.)
Duke University (N. C.)

Dept. of Physical Therapy School of Med. & X-ray Tech. & Medical Record Libraryship School of Medicine

School of Medicine
School of Nursing
Duquesne University (Pa.)
School of Nursing

Eastern Kentucky State College
Eaton County (Mich.) Health Dept.
Eaton Rapids (Mich.) School
Edinburgh, University of (Scotland)
Faculty of Medicine
Education Communications Service,
University of Chicago
Educational Institute of Scotland
El Salvador, University of
Faculty of Dentistry
Faculty of Medicine

Emory University (Ga.)
College of Education
School of Business Admin.

School of Medicine School of Nursing

School of X-ray and Med. Tech. Ettelbruck Agri. School, Luxemburg Eye and Ear Research Fund, Inc. (Chicago) Ferris Institute (Big Rapids, Mich.) Florida State Dept. of Education Foundation for Research on Human Behavior Franklin Institute of the State of Pa. Franklin D. Roosevelt Rehabilitation Center (Cuba) General Hospital of Guatemala General Hosp. Managua (Nicaragua) George Peabody College for Teachers (Tenn.) Dept. of Education Dept. of Nursing Education George Washington U. (Wash., D.C.) School of Medicine Georgetown U. (Washington, D.C.) School of Dentistry School of Medicine School of Nursing Georgia Dept. of Public Health Georgia State Dept. of Pub. Inst. Georgia, University of College of Education Georgia Center for Contin. Ed. School of Medicine Glasgow, University of Goodwill Indus. of Battle Creek, Inc. Grand Haven (Mich.) Munic. Hosp. Grand Haven (Mich.) Sp. Education Project for Retarded Children Grand View Hosp. (Ironwood, Mich.) Great Falls, College of (Mont.) Guadalajara, University of (Mexico) Faculty of Medicine Gudbrandsdal Public School (Norway) Hahnemann Medical College and Hospital of Philadelphia

Haculty of Medicine
Gudbrandsdal Public School (Norway
Hahnemann Medical College an
Hospital of Philadelphia
Haiti, University of
Faculty of Nursing
Hamline University (Minn.)
Hartwick College (N. Y.)
School of Nursing
Harvard University
Medical School

line University (Minn.)
wick College (N. Y.)
School of Nursing
vard University
Medical School
School of Dental Medicine
School of Education
School of Public Health

Hayes-Green-Beach Memorial Hosp. (Charlotte, Mich.) Hillsdale (Mich.) Com. Health Ctr. Hillsdale (Mich.) Co. Health Dept. Hillsdale (Mich.) Co. School Board Holland (Mich.) City Hospital Homer (Mich.) Community School Homer (Mich.) Library Honduras, University of Faculty of Medicine Hospital Council of Philadelphia Hospital Dos de Mayo (Peru) Hospital Dos Servidores do Estado (Brazil) Hospital Loayza Sch. of Nurs. (Peru) Hospital Obrero (Peru) Hosp. San Juan de Dios (Costa Rica) Howard University (Wash., D.C.) College of Dentistry College of Medicine

Idaho State Dept. of Public Inst.
Idaho University
Dept. of Bacteriology
Illinois Dept. of Public Health
Illinois State Dept. of Public Inst.
Illinois, University of
College of Dentistry
College of Medicine
College of Occupational Therapy

Incorp. Dental Hospital of Ireland
Indiana Hospital Assn.
Indiana University
School of Dentistry

School of Ed., Nurs. Ed. Div. School of Medicine

Inst. of International Education, Inc.
Institute of Nutrition of Cen. America
and Panama (Guatemala City)

Inter-Agency Council on Recreation (Mich.)

Inter-American Inst. of Agri. Sciences International Conf. of Ag. Economists Internat'l Inst. for Land Reclamation and Land Improvement (Holland) Ionia (Mich.) Co. Memorial Hosp. Iowa State College

Division of Agriculture
Iowa State Dept. of Public Instruction

Iowa, State University of College of Dentistry College of Medicine School of Nursing Graduate School Institute of Agricultural Medicine

Irish Countrywomen's Assn.

Isle of Man Fed. of Young Farmers' Clubs

James Decker Munson Hospital (Traverse City, Mich.)

Jefferson Med. College of Philadelphia Johns Hopkins University (Md.) School of Hygiene & Pub. Health School of Nursing Wilmer Ophthalmological Inst.

Kalamazoo City-County Health Dept. Kalamazoo County Special Education Project for Retarded Children Kalkaska (Mich.) Co. Hosp. Author. Kansas City, University of (Mo.) School of Dentistry Kansas State Board of Health

Kansas, University of Department of Nursing

> School of Fine Arts, Dept. of Occupational Therapy School of Medical Technology School of Medicine

Kellogg, W. K., Agricultural School (Kalamazoo County)

Kentucky State Dept. of Health Kentucky State Dept. of Pub. Inst. Kentucky, University of

College of Education Dept. of Bacteriology

Keuka College (N. Y.) School of Nursing

Lakeview (Mich.) Consolid. Schools Lakeview (Mich.) Hospital Assn. Lakeview Municipal Hosp. (Paw Paw, Mich.)

Laval University (Quebec) Faculty of Medicine School of Nursing Lee Mem. Hosp. (Dowagiac, Mich.) Leeds, University of (England) School of Education

Leila Y. Post Montgomery Hospital (Battle Creek)

Level Park School (Calhoun County, Mich.)

Lockwood General Hosp. (Petoskey, Mich.)

London School of Hygiene & Tropical Medicine

London, University of Dept. of Dental Surgery Faculty of Medicine

Long Island College of Medicine Lorain County (Ohio) Health Dept. Louisiana State Dept. of Education Louisiana State Dept. of Health

Louisiana State University School of Medicine School of Nursing

Louisville, University of (Ky.) School of Dentistry

School of Medicine Loyola University (Ill.)

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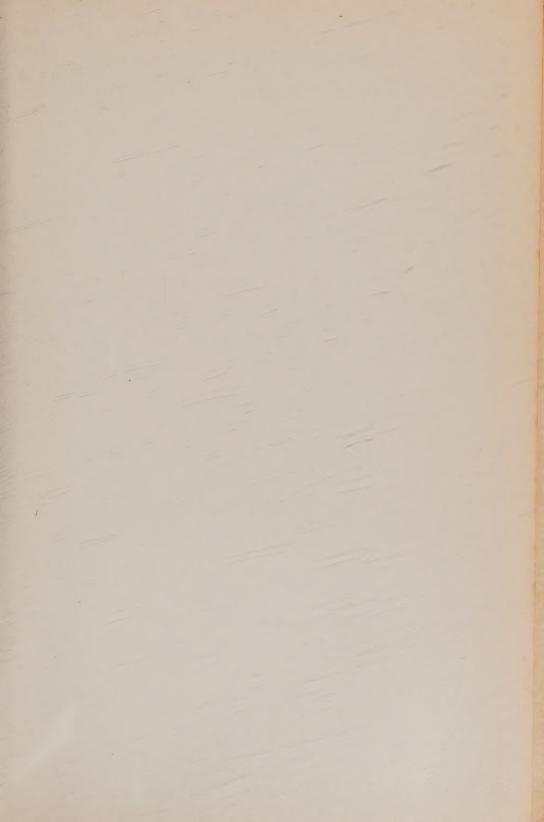












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